

DOCUMENT RESUME

ED 138 022

EC 100 656

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TITLE Observational Checklists for Referral: Technical Report. Final Report.
INSTITUTION Southwest Educational Development Lab., Austin, Tex.
SPONS AGENCY Bureau of Education for the Handicapped (DHEW/OE), Washington, D.C.
BUREAU NO 443CH60398
PUB DATE 22 Oct 76
GRANT G007500592
NOTE 103p.

EDRS PRICE MF-\$0.83 HC-\$6.01 Plus Postage.
DESCRIPTORS *Check Lists; Clinical Diagnosis; Early Childhood Education; *Handicapped Children; *Identification; Informal Assessment; Referral; *Screening Tests; Statistical Data; *Student Evaluation; Test Construction; Test Reviews; *Test Validity
IDENTIFIERS *Observational Checklists for Referral

ABSTRACT

Presented is the technical report on development of the Observational Checklists for Referral (OCR), developed to assist teachers of young children in identifying problems that interfere with learning, making appropriate referrals to other professionals, and communicating with parents and professionals. Sections cover summaries of external consultant critiques, formative evaluation reports from users, and statistical analyses of data obtained from two validation studies, as well as recommendations regarding use and further development. Specific topics addressed include content validity, criterion-related validity, construct validity, procedures and comparisons of two validation studies, teacher feedback, and user comments. Appendixes include a pilot test version of the OCR which includes sections on general behavior, health, vision, hearing, speech, and motor abilities; instructions for consultants; consultant reviews; a teacher feedback form; a consultant medical form; and consultant speech form. (Author/SBH)

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Project No. 443CH60398
Grant No. G007500592

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OBSERVATIONAL CHECKLISTS FOR REFERRAL: TECHNICAL REPORT

October 22, 1976

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Office of Education

Bureau of Education for the Handicapped

EC100656

ABSTRACT

The Observational Checklists for Referral (OCR) were developed to assist teachers of young children in identifying problems that interfere with learning, making appropriate referrals to other professionals, and communicating with parents and professionals. The OCR includes a teacher manual, a General Checklist to be completed for each child, and Specific Checklists for the areas of Health, Vision, Hearing, Speech and Language, Motor, and Behavior. Specific checklists are to be completed only for children identified on the General Checklist.

This technical report on development of the OCR includes summaries of external consultant critiques, formative evaluation reports from users, and statistical analyses of data obtained from two validation studies as well as recommendations regarding use and further development.

The OCR has been pilot tested by Head Start, Day Care, and public school teachers and has been reviewed by a team of external consultants representing the fields of Speech Pathology, Audiology, Early Childhood, Special Education, and Psychology. Research studies comparing teacher-administered OCR results with screening evaluations performed by SEDL staff and external specialists (clinical child psychologist, educational diagnostician, speech pathologist, audiologist, pediatrician, optometrist, and nurses) have been conducted.

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Final Report

Project No. 443CH60398
Grant No. G007500592

Observational Checklists for Referral:
Technical Report

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Austin, Texas

October 22, 1976

The research reported herein was performed pursuant to a grant with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U. S. DEPARTMENT OF
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Office of Education
Bureau of Education for the Handicapped

PREFACE

The Observational Checklists for Referral were developed as a part of the Ability Development Program under a grant from the Bureau of Education for the Handicapped. The Ability Development Program is designed to develop and test materials and procedures for: (1) identification of young children with mild to moderate problems affecting learning, and (2) supplementary instruction to help the identified children progress at a level commensurate with that of their peers. Teacher training materials and workshops, classroom curriculum, and materials for parents are under development as a part of this project.

The Observational Checklists for Referral (OCR) were developed to assist teachers and assistant teachers in identifying young children who have problems that may interfere with learning. In addition, the OCR is designed to enable teachers to make appropriate referrals to other professionals and to more precisely and objectively describe observations made.

Project staff who have assisted in the development of the OCR include the following: Deborah Acevedo, Libby Doggett, Susana Hammett, Julia Niehaus, Claire Price, Alan Seitel, Sherry Young, and Becky Zuniga. Dr. Jerome Schmidt had primary responsibility for data analysis and preparation of the technical section of this report.

Sites participating in the testing of the OCR included Child, Incorporated, Ruth Hernandez, Program Director, Mary Leonard, Health Services Coordinator; A-Bar-Z Ponderosa Day Care Center, Vera Hooper, Director; and Edgewood Independent School District, Ciomara Rodriguez, Kindergarten Supervisor.

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INTRODUCTION

The Observational Checklists for Referral (OCR) were developed to assist teachers and assistant teachers in identifying and referring children in need of more intensive examination or evaluation by other professionals. The OCR has been developed as a part of two projects funded by the Bureau of Education for the Handicapped ("A Project To Develop Curriculum for Four-Year-Old Handicapped Mexican American Children," Grant No. OEG-O-74-0550 and "The Ability Development Project for Five-Year-Olds," Grant No. G007500592). Initial development was conducted primarily with four-year-old Mexican American children and later expanded to include Anglo and Black children between the ages of three and six years.

In 1973, at the beginning of the first project, it became evident that teachers who had no previous training in special education or in identification of handicapping conditions needed a consistent and objective method of identifying problems of preschool children. Several checklists were collected from various sources and reviewed by the project staff. Most of the checklists were designed for older children, focused on only one area, or included technical terminology. Further, only limited information on how to observe, refer, or follow up was included. There was an obvious need for an interrelated set of checklists, written in lay terms, which could be completed in a minimal amount of time by the classroom teacher.

A preliminary set of checklists was developed by the project staff and tried out by six teachers and assistant teachers in three day care centers in Austin, Texas. Teacher feedback and staff observations provided the basis for a revision of the checklists and design of an initial version of the manual. In the spring of 1974, 10 teachers and assistant teachers completed the checklists, following instructions in the manual. The teachers and staff observers provided written feedback. The manual and checklists were also reviewed by external consultants and by a group of teachers enrolled in a course in child development at Austin Community College. The manual and checklists were revised on the basis of the information obtained. A report of this earlier development is included in a two-volume document, Final Report: A Project To Develop Curriculum for Four-Year-Old Handicapped Mexican American Children (Evans, J. S., 1974) and is available through ERIC.

The second version of the OCR included an instructional manual for the teacher, a General Checklist to be completed for all children in the classroom, and six Specific Checklists to be completed on all children identified on the General Checklist as having some difficulty.

The OCR manual includes specific, detailed instructions for completing each checklist, a general discussion of each Specific Checklist and the problem area it is designed to identify, descriptions of common behavioral manifestations of those problems, and guidelines for making and following up referrals. Observational skills and techniques

are explained, as well as descriptions of the specific behaviors the teachers should note in each child.

Explanations and descriptions are written in nontechnical language for use by paraprofessional as well as professional teachers of young children. Therefore, the language used throughout the manual is designed for the reader who has not had extensive training in special education, observational techniques, or screening procedures.

The General Checklist contains items which are designed for initial identification purposes. They are designed to cover, in broad terms, common visible or behavioral symptoms of problems in young children. Each item on the General Checklist relates to one or more items on Specific Checklists. The Specific Checklists describe unusual behaviors or physical symptoms in greater detail. The Specific Checklists, when completed, can provide information about the child's classroom behavior, which leads to an appropriate referral for a more comprehensive evaluation by other professionals.

As a part of the second project beginning in June 1975, the revised version of the OCR manual and checklists was tried out by teachers and assistant teachers in Riverside Day Care Center, Austin, Texas, and by public school kindergarten teachers in Edgewood Independent School District, San Antonio, Texas. A pilot validation study was conducted in Austin, Texas in an effort to determine the feasibility of conducting a more extensive validation study. The purpose of the study was to determine the number of over- and under-referrals (false positives and false negatives) by comparing teacher-administered OCR results with screening evaluations by external consultants (clinical child psychologist, pediatrician, educational diagnostician, speech therapists - Spanish and English, and nurses). Results of this study are reported in the following section, Validation Study I - 1975.

The results of this validation study indicated that the usefulness of the OCR should be expanded for older and younger children, following revision and a more extensive validation study. Feedback obtained from the teachers, staff observations, and data from the pilot study provided the basis for a second revision of the manual and checklists.

Following revision of the manual and checklists, a second validation study was conducted at A-Bar-Z Ponderosa Day Care Center in Austin, Texas, during the summer of 1976. This center was selected for the study because there was a wide age range among the children and both middle-income and low-income children were enrolled. This study included 126 children ranging in age from 29 to 89 months (mean age = 56.35 months). Results of teacher-completed checklists were compared with professional examinations by a pediatric nurse, audiologist, speech pathologist, psychologist, and educational diagnostician. In order to determine which of the checklist items most accurately identified children found by the professional evaluators to have the problems indicated, the data were subjected to a discriminant analysis. Results of this study are reported in the following section, Validation Study II - 1976.

The OCR has been revised on the basis of reviews by external consultants, user feedback, and the results of the two validation studies. In the following sections of this technical report, the results of reviews by external consultants are summarized with more detailed information included in Appendices A and B. User feedback or information provided by teachers is described in the following section. This is followed by data from the two validation studies.

The major goal in developing the OCR was to produce a written instrument which would assist teachers in accurately identifying children in need of referral for more extensive evaluation and which placed minimal reliance upon specialized training of the teachers. A comparison of the results of the two validation studies indicates that a training session with teachers prior to using the OCR does increase the accuracy of identification. However, even without training, the rate of accurate identification is good and the rate of false negatives, (no problem identified when one does exist) is low. The rate of false negatives ranged from 4.3% to 19.2% with the higher rates being for questionable problems such as visual problems of muscle imbalance and health problems of umbilical hernia. The positive responses by the teachers and assistant teachers using the OCR, none of whom had previous training in identification of existing or potentially handicapping conditions, clearly indicate the usability of the OCR by teachers of young children.

VALIDATION STUDIES

Initial design of the Observational Checklists for Referral (OCR) began in the fall of 1973 and the first validation studies occurred in the spring of 1975. Through a series of studies, review and revisions, adequate levels of content, criterion-related, and construct validity have been demonstrated.

During the initial design and development, establishing content validity was of primary concern in order to insure that the checklist items were relevant and comprehensive. The content validity has been reassessed throughout the development of the OCR.

As development progressed, it became vital to demonstrate the criterion-related validity of the instrument. That is, it was important to describe the degree of relationship between the checklist results and professional examiner evaluations of the children. Studies conducted by the project staff have shown that the criterion-related validity has been enhanced in the latest versions of the OCR.

Establishing the construct validity of the OCR was the focus of studies completed in the fall of 1976. Statistical techniques were employed to determine the degree to which certain constructs account for the observations obtained using the OCR. The results of these analyses indicate an adequate degree of construct validity.

Studies of the OCR have been conducted continually since the initial phases of development. The purpose of these studies has been to provide data on the validity of the instrument and to identify those parts of the instrument needing further revision. These validity studies have varied in method and scope, yet each has provided the data necessary to demonstrate some facet of the usefulness and pertinence of the instrument in identifying debilitating problems of children.

Content Validity

"Content validity is demonstrated by showing how well the content of the test samples the class situations or subject matter about which conclusions are to be drawn" (Standards for Educational and Psychological Tests and Manuals, 1966, p. 12). In the case of the OCR, content validity was assured by the method of item selection, external consultant review, and user feedback.

Initially, content validity was enhanced by reviewing and selecting items from existing checklists developed by agencies concerned with specific areas of disability, such as indicants of visual problems listed by the Optometric Association. An item pool for each checklist was developed, comprised of items from existing checklists, recommendations by teachers and special educators, and from literature relevant to the six problem areas. The criteria used in selecting the items for use on the OCR checklists were as follows: (1) The item should describe deviant behavior in nontechnical terms; (2) The item should be developmentally related to the behavior of young children; (3) The item should be linguistically and culturally unbiased; (4) Each checklist should be composed of items that include common behavioral indicators of problems; (5) The items on each checklist should provide a comprehensive sampling of deviant behaviors in that area, with limited overlap between items. The checklists were then compiled on the basis of the above criteria.

Consultants, selected on the basis of their expertise in the areas covered by the OCR, were employed to evaluate the comprehensiveness of each checklist and the adequacy of each item relative to the purpose of the instrument. The first consultant critique was conducted in the fall of 1974. This initial external review of the OCR was generally favorable and also provided recommendations for change or clarification. In the spring of 1976, a major review of the manual and of the checklist was performed by eight external consultants. Each reviewer was requested to respond to specific questions related to the entire OCR and to carefully critique specific sections of the OCR. These reviews were very positive. The few recommendations for changes in the manual were incorporated in the revision. The results of these reviews are included in Appendix C.

A critique to determine item relevance and reading clarity was performed by a group of 10 experienced preschool teachers during the spring of 1975. These teachers were selected because they were representative of the targeted user. Their critique of the OCR was most favorable and indicated that the earlier revisions of the checklists had resulted in a more precise and thorough instrument.

User feedback has provided another measure of content validity of the OCR. Since the fall of 1974, written and oral feedback has been gathered from more than 40 classroom teachers who have used the OCR. The most recent feedback (1976) has confirmed the appropriateness and

relevance of the checklist items in describing the problem areas. It is apparent that user feedback has become more favorable with each revision of the OCR.

Criterion-related Validity

"Criterion-related validity is demonstrated by comparing the test scores with one or more external variables considered to provide a direct measure of the characteristic or behavior in question" (Standards for Educational and Psychological Tests and Manuals, 1966, p. 13). Two major studies have been undertaken to determine the criterion-related validity of the OCR. In both studies, teachers' ratings of students on the OCR were compared with actual examinations and ratings of the children by trained or qualified examiners. The purpose of these studies was to determine the extent to which teacher observations, based on the OCR, agreed with the problems identified by expert examiners.

Construct Validity

Construct validity is determined by "the degree to which explanatory concepts or constructs account for performance on the test" (Standards for Educational and Psychological Tests and Manuals, 1966, p. 13). In the case of the OCR, construct validity was determined through the use of a Multiple Discriminant Analysis. This analysis determined the presence of checklist items and clusters of items that discriminate between the expert examiner ratings (1 through 4). Therefore, since the examiner ratings indicate the presence or absence of problem areas, at least one of the items on each Checklist must discriminate between the examiner categories if the OCR is actually identifying a child's problem. At least one significant root was found for each problem area. Thus the predicted results were found for all of the checklists, thereby establishing construct validity for each checklist in the OCR. It is not surprising that a high degree of construct validity was demonstrated for the OCR since the OCR data are objective observations of problem-related behavior. That is, since little inference is being made about the child's condition, the OCR observations provide a direct and objective measure of the Construct in question.

Content, Criterion-related and Construct Validity have been demonstrated for the checklists on the OCR. Studies conducted over the last two years have demonstrated high levels of validity (construct, criterion-related and content) in all except the Motor area. These studies have thereby shown that the OCR does perform the function for which it was designed. That is, it enables the observer to more precisely identify children who might be experiencing a debilitating problem.

STUDY I - 1975

The first study to determine the criterion-related validity of the OCR was conducted during December of 1975. The study included a total of 87 male and female preschool subjects enrolled in day-care centers in the Austin area. The children ranged in age from 76 to 37 months, with a mean age of 54.2 months. The subjects were Black and Mexican American children from low income backgrounds. The external examiners were professionals in the areas of Clinical Child Psychology, Pediatrics, Educational Diagnostics, Speech Pathology, and Nursing.

Procedure

Teachers and assistant teachers from four classrooms met with the project staff and received instructions regarding the purpose of the study and instructions on completing the checklists. Assistant teachers were asked to assist the teachers in observing the children and contributing information. The OCR manual and the General Checklists for each child were given to the teachers at the conclusion of the meeting. Approximately one week later, a project staff member met with the teachers individually to answer their questions, collect the General Checklists, and distribute Specific Checklists to be completed for children identified on the General Checklist. The completed Specific Checklists were collected the following week and reviewed by the project staff. Throughout the time that the teachers were completing the checklists, project staff members were continually available to respond to questions.

The next step in the validation process was to verify the checklist information through individual examinations by professionals in each area covered on the OCR. For financial reasons it was not possible to have all the children checked by a professional in each of the areas. Therefore, different numbers of children were examined in each area.

The examiner ratings were compared with the teacher ratings on the OCR. The actual rate and percentage of agreement between the teacher ratings on the OCR and the examiner ratings are portrayed in Table I for the areas of Behavior, Health, Hearing, Speech and Language, Motor, and Vision. The frequency of agreement between the OCR ratings shows the number and percentage of children with a positive OCR rating (a problem identified by the teacher) who were also identified by the examiner, that is, accurate positive identifications. The second column shows the degree of agreement between the OCR results and the examiners' findings on children found to have no problems or accurate negative identifications. If identifications were 100% accurate, all children examined would fall into one of these two columns. Total accurate identifications (correct positives + correct negatives) are shown in column three. Thus the 1975 version of the OCR shows an accuracy of 56.3% for the Health Checklist, 72.7% for the Behavior Checklist, 77% for the Speech and Language Checklist, and 75.9% for the Hearing Checklist. False positives (over-identification), or identifications

TABLE I

Frequency and Percentage of Agreement/Nonagreement Between OCR and Examiner Observations

1975 Validity Study

CHECKLIST	CONFIRMED IDENTIFICATION			UNCONFIRMED IDENTIFICATION			TOTAL No./%
	OCR-POSITIVE EXAMINER- POSITIVE No./%	OCR-NEGATIVE EXAMINER- NEGATIVE No./%	TOTAL OCR-EXAMINER AGREEMENT No./%	OCR-POSITIVE EXAMINER- NEGATIVE No./%	OCR-NEGATIVE EXAMINER- POSITIVE No./%	TOTAL OCR-EXAMINER NON-AGREEMENT No./%	
Hearing	7 / 12.1%	37 / 63.8%	44 / 75.9%	11 / 19.0%	3 / 5.1%	14 / 24.1%	58 / 100%
Speech/Language	12 / 16.2%	45 / 60.8%	57 / 77.0%	8 / 10.8%	9 / 12.1%	17 / 22.9%	74 / 100%
Behavior	13 / 59.1%	3 / 13.6%	16 / 72.7%	1 / 4.6%	5 / 23.7%	6 / 28.3%	22 / 100%
Health	6 / 18.8%	18 / 37.5%	24 / 56.3%	4 / 12.5%	10 / 31.2%	14 / 43.7%	38 / 100%
Vision	0 / 0 %	85 / 97.7%	85 / 97.7%	0 / 0 %	2 / 2.3%	2 / 2.3%	87 / 100%
Motor	0 / 0 %	61 / 85.9%	61 / 85.9%	9 / 12.7%	1 / 1.4%	10 / 14.1%	81 / 100%

by examiners which were not made by teachers using the OCR, are shown in the fourth column. False negatives (under-identification), or identification of problems by examiners which were not identified by teachers, are shown in the fifth column.

Hearing screenings were conducted with health aides under the direction of a nurse for 58 of the children. Portable audiometers were used for the screenings which were conducted in an empty classroom. Because of external noise level, these screenings were performed at 40 db. across only three frequencies (500, 1,000, 4,000 Hz.). Data from the hearing screenings should be considered with caution as the testing conditions were less than ideal. On the basis of the data obtained, there was 75.9% agreement between the OCR results and the screenings, 19% over-referrals or false positives (11 children identified on the checklist who passed the screening) and 5.1% under-referrals or false negatives (3 children were not checked on the Hearing Checklist who did not pass the screening).

Speech and Language screenings were conducted by a certified Speech Pathologist using the Goldman-Fristoe Sounds in Words. A total of 74 children were included in this examination. Of all the checklists, the Speech Checklist provided the highest rate of agreement between OCR results and screening by the examiner. Correct identification was 77.0%, over-referrals (OCR Checklist positive, examiner rating negative) was 10.8% and under-referrals (no checks on the Speech Checklist, positive identification of problems by the examiner) was 12.1%.

Verification of the Behavior Checklist required a more involved procedure. A Clinical Child Psychologist observed individual children in the classrooms at various times throughout the day. Each child was observed on at least three occasions for a period of 30 minutes to one hour. This required several hours of observation and therefore it was not feasible to include all children. Thus, five children from each of the four classrooms were selected for intensive observations. In each classroom, four children were randomly selected from the group of children who had been checked on the OCR as having some type of problem, and one child was selected from the group of children checked as having no observable problem. The list of names was given to the psychologist who then observed the children. The psychologist had not seen the OCR manual or checklists and was not aware of which children had been identified by the teacher. The psychologist was asked to observe each child and to list those children with identifiable problems in need of special assistance. In the process of observation, the psychologist identified two additional children whose names were not included on the original list for observation. Thus, a total of 22 children were observed. The total percentage of accurate identifications was 72.7%; the percentage of over-referrals (identified by the teacher but not by the psychologist) was 4.6% (1 child), and five children or 23.7% were not identified by the teacher but identified by the psychologist, thus constituting under-referral.

Health screenings were conducted by a pediatrician, following a form used by the day-care center (see Appendix E). The pediatrician

had not seen the OCR manual or the Health Checklist and was not aware of the type of information included. As for the behavior screenings, it was not economically feasible for all children to be examined. Therefore, ten children who had been identified on the Health Checklist were scheduled for medical examinations as well as ten children who had not been identified. The medical examinations progressed more rapidly than had been anticipated and the physician had time to examine additional children. Therefore, the decision was made to examine as many children as possible from the two classrooms for 5-year-olds. This decision was based on the probability that these children would be entering public school the following year and were most in need of medical screening. An additional 18 children were examined, bringing the total number of children included to 38.

Comparison of the Health Checklist identifications with the physician examinations was more complex than for the other checklists. The physician identified some problems which were not related to the checklist items, such as umbilical hernias or enlarged tonsils. In the analysis of the data, these were not considered as constituting an under-referral as teachers would not be expected to examine for or recognize these problems. Of the ten under-referrals (OCR-negative, Examiner-positive), eight children had dental caries which were identified by the physician but not observed by the teacher. The degree of severity was not defined and teachers rarely notice dental caries unless they are extremely severe. However, as there is an item, "bad teeth", on the Health Checklist, this was considered an under-referral. Had this single item not been considered an under-referral, the rate of examiner-OCR agreement would have been much higher.

The total number of accurate identifications was 56.3%, the number and percentage of over-referrals (Health Checklist but no problem identified by the physician) was 12.5% and the number of under-referrals (no Health Checklist but problem identified by physician) was 31.2%.

Visual screenings were conducted for all the children by health aides working under the direction of a nurse. The Snellen E chart, a measure of distance acuity, was the only measure used. None of the children had been identified as having possible problems on the visual checklist, and only two children were identified by the examiner. This information was not included in the analysis for several reasons. The data provided a false picture of the accuracy of the Visual Checklist; that is, 85 of the 87 identifications were accurate--no check on the Visual Checklist and no identified problem, and only 2 of the 87 were possible under-identifications. This is misleading information as only distance vision was checked. Furthermore, the children's responses to the direction in which the stimulus (E) faced were erratic. It was difficult to determine whether the children understood the task.

The data were subjected to two types of statistical analysis: Chi Square analysis (Table II) and Point biserial correlation (Table III).

TABLE II

Chi Square and p Values for

OCR and Examiner Agreement

1975 Study

CHECKLIST	CHI SQUARE VALUE	p
Speech/Language	13.48	.0001
Hearing	8.57	.0001
Behavior	3.14	.08
Health	.83	.30
Vision	No analysis	

TABLE III
Correlation Coefficients and p Values for
OCR Ratings and Examiner Ratings
1975 Study

CHECKLIST	CORRELATION COEFFICIENT	p VALUE LESS THAN
Speech/Language	.610	.01
Hearing	.591	.01
Behavior	.524	.01
Health	.670	.01
Vision	.820	.01

A 2 x 2 Contingency Chi Square analysis was performed on the frequency of identification data for each problem area. The results of these analyses are presented in Table II. As noted in Table II, the Chi Square values for the Speech and Hearing data were significant, while the X^2 value for the Behavior data approached but did not reach significance ($P = .08$). The analyses indicate a significant rate of agreement between the OCR results and the examiner evaluations on the Speech Checklist and the Hearing Checklist. The physician who conducted the health examinations included the identification of health-related problems outside the scope of the checklist (e.g., tubes in ears and immunizations not up to date). It is possible that significant results might have been found had the physician simply attempted to determine the presence of observable health-related problems.

In order to describe the degree of relationship between the examiner ratings and the OCR results, a point-biserial correlation was performed on these data. The correlation coefficients for each of the problem areas (Speech/Language, Hearing, Behavior, Health, and Vision) were found to be significant ($P < .01$). The correlation coefficients, coupled with the nonsignificant Chi Square values, suggest that the agreement between the OCR data and the examiner ratings in the Health and Behavior Areas occurred primarily in the extreme cases where the child received an examiner rating of #1 "No problem" or #4 "Definite problem." These findings indicate that the Behavior and Health Checklists are more accurate in discriminating between those cases at the extremes of the scale. This conclusion is not surprising since the cases that fall in the middle range of the scale are by definition the more ambiguous problems and thereby more difficult for the teacher as well as the examiner to identify.

STUDY II - 1976

The OCR manual and checklists were extensively revised following the previous study, in an effort to improve the accuracy of the OCR. A second study was conducted during June, 1976 to assess the validity of the revised OCR with a wider age range of children from different socioeconomic backgrounds than those sampled in the 1975 study. This study included 126 subjects (63 male and 63 female) ranging in age from 29 to 89 months ($X = 56.4$ months; $S. D. = 13.4$ months), attending a private day care center in Austin, Texas. Thirty-one of the subjects were Black and Mexican American children from low-income families, and the remainder were children from middle-income families.

The same basic procedure was followed in this study as in the 1975 study. The external examiners were professionals in the areas of Speech Pathology, Audiology, Nursing, Educational Psychology and Diagnostics, and Optometry. In this study, data from the vision screening were included in the analysis as a more comprehensive screening was performed. However, data from the motor screening were not included in the data analyses, since once again, too few children were identified in this area.

Procedure

Teachers from six classrooms met briefly with the project director to receive instructions regarding the purpose of the study. As a secondary purpose of this study was to determine the effectiveness of the OCR when used without project staff instructions or direction, the teachers were asked to read the manual and discuss it with each other prior to completing the checklists. Each teacher was given a complete set of checklists (General plus each Specific Checklist) for all the children in each classroom. No further instructions were given and the checklists were collected at the end of one week.

Following collection of the checklists, individual examinations were performed by professional experts in each area covered in the OCR. Although the examinations were more extensive than those performed in the previous study and more children were included, it was not financially feasible to have all of the children examined. Therefore, different numbers of children were examined in each area.

Criterion-related validity for each checklist was determined by comparing the examiner ratings with OCR ratings by the teachers. The actual numbers and percentages of agreement between the teacher ratings on the OCR and the examiner ratings are shown in Table IV for the areas of Hearing, Speech and Language, Behavior, Health, and Vision. The frequency of agreement between the OCR ratings and the examiner ratings are shown in each column. The first column shows the number and percentage of children with a positive OCR rating (a problem identified by the teacher) who were also identified by the examiner--that is, accurate positive identifications. The second column portrays the degree of agreement between the OCR results and the examiners findings

TABLE IV

Frequency and Percentage of Agreement/Nonagreement Between OCR and Examiner Observations

1976 Validity Study

CHECKLIST	CONFIRMED IDENTIFICATION			UNCONFIRMED IDENTIFICATION			TOTAL No./%
	OCR-POSITIVE EXAMINER- POSITIVE No./%	OCR-NEGATIVE EXAMINER- NEGATIVE No./%	TOTAL OCR-EXAMINER AGREEMENT No./%	OCR-POSITIVE EXAMINER- NEGATIVE No./%	OCR-NEGATIVE EXAMINER- POSITIVE No./%	TOTAL OCR-EXAMINER NON-AGREEMENT No./%	
Hearing	13 /71.8%	66 /60.0%	79 /71.8%	25 /22.7%	6 / 5.5%	31 /28.2%	110 /100%
Speech/Language	14 /14.0%	51 /51.0%	65 /65.0%	21 /21.0%	14 /14.0%	35 /35.0%	100 /100%
Behavior	11 /23.9%	16 /34.7%	27 /58.6%	17 /36.9%	2 / 4.3%	19 /41.2%	46 /100%
Health	10 /12.2%	27 /32.9%	37 /45.1%	35 /42.7%	10 /12.2%	45 /54.9%	82 /100%
Vision	8 /30.8%	10 /38.6%	18 /68.6%	3 /11.6%	5 /19.2%	8 /30.8%	26 /100%

on children found to have no problems or accurate negative identifications. Total accurate identifications (correct positives + correct negatives) are shown in column three. Thus the 1976 version of the OCR shows an accuracy of 45.1% for the Health Checklist, 58.6% for the Behavior Checklist, 65.0% for the Speech and Language Checklist, and 71.8% for the Hearing Checklist. False positives (over-identification), or identifications by examiners which were not made by teachers using the OCR, are shown in the fourth column. False negatives (under-identification), or identification of problems by examiners which were not identified by teachers, are shown in the fifth column.

Hearing screenings were conducted for 110 children by a certified audiologist in an isolated, carpeted room. The equipment utilized in the screening procedure included a Beltone 10-D portable audiometer. The electroacoustic pathway terminated in a matched pair of TDH-39 receivers mounted in MX-41AR cushions. The stimulus was demonstrated for each child before the headset was placed on the child's head. A 100 db. HTL (ANSI) 2000 Hz pure tone was introduced as the child listened, and the examiner noted that the tone was heard. When the child also indicated that the tone was heard, the headset was placed on his or her head and the final instructions were given. These instructions were to raise a hand every time a "little soft beep" was heard. The children were then tested using a 25 db. HTL (ANSI) pure tones ranging in frequency from 500 Hz through 8000 Hz. There was 71.8% agreement between the OCR results and the screenings, 22.7% over-referrals or false positives (25 children identified on the checklist who passed the screening) and 5.5% under-referrals or false negatives (6 children were not checked on the Hearing Checklist who did not pass the screening).

Speech and Language Screenings were conducted by a certified Speech Pathologist following a screening survey form used in the Department of Speech Pathology and Audiology at The University of Texas at Austin (see Appendix F). A total of 100 children were included in this examination. The screening took from five to fifteen minutes per child. The procedures used varied according to the age level of the child and included having the children name pictures, repeat sentences, tell stories, provide information about themselves (name, age, sex, birthday, etc.), count, identify colors, identify body parts, repeat digits, blend sounds auditorily, answer wh-- questions, etc. Oral peripheral examinations were performed and spontaneous speech was elicited from each child. Correct identification was 65.0%, over-referrals (OCR Checklist positive, examiner rating negative) was 21.0% and under-referrals (no checks on the Speech Checklist, positive identification of problems by the examiner) was 14.0%.

Again, verification of the Behavior Checklist required a more involved procedure. An educational diagnostician with advanced degrees in Early Childhood, Special Education, observed individual children in the classrooms at various times throughout the day. Each child was observed on at least two occasions for a period of 30 minutes to one hour. This required several hours of observation and therefore it was not feasible to include all children. From each of five classrooms,

10 children were selected by the project staff for observation. Within each classroom, five children were selected from those who had been identified by the teacher on the Behavior Checklist, and five children who had not been identified were selected. The list of names was given to the examiner who then observed the children during free play, independent and group activities. The examiner was not able to observe all the listed children due to time limitations, therefore data were available for only 46 children. The percentage of accurate identifications was 58.6%; the percentage of over-referrals (identified by the teacher but not by the examiner) was 36.9%; and two children, or 4.3%, were not identified by the teacher but were identified by the examiner, thus constituting under-referrals. A number of the over-referrals occurred in the three-year-old classroom in which the teacher had identified crying as a major problem.

Health screenings were conducted by a registered pediatric nurse, following a form used in training public school nurses. The nurse had not seen the OCR manual or Health Checklist and was not aware of the type of information included. As for the Behavior screenings, it was not economically feasible for all children to be examined. The 45 children checked on the Health Checklist as well as 37 additional children were screened for physical problems. A total of 82 children were screened for health problems. Again, comparison of the Health Checklist identifications with the physical examinations was more complex than for the other checklists. The nurse examined each child for diseases of the eyes, ears, nose, throat, heart, and lungs, as well as observing the child while walking, hopping, jumping, and dressing and undressing. Several problems not directly related to the checklist items, such as tubes in the ears, were identified. This was included on the data analysis, however, as this can constitute a problem. (This also indicated a definite need for addition to the Health Checklist of pertinent medical information affecting the child's activities.) The total number of accurate identifications was 37 or 45.1%. The under-referrals were 12.2% (primarily ear tubes), and over-referrals were 42.7%.

Vision screenings were conducted by an optometrist for 26 children. All children (N=11) who had been identified on the Visual Checklist were included as well as children selected at random from among those who had not been identified on the Visual Checklist. The optometrist used either the Snellen E chart or a picture chart, depending upon the age and responsiveness of the children, and checked for muscle imbalance and eye disease. Correct identification or agreement between Checklist results and optometrist screenings occurred in 68.6% of the comparisons. There were 3 over-referrals (Checklist positive, examination negative) and 5 or 19.2% under-referrals (Checklist negative, examination positive).

The data were subjected to two types of statistical analysis: Chi Square (Table V) and Point Biserial correlation (Table VI). Two by Two Contingency Chi Square analyses were performed on these data (Table V). These analyses resulted in significant Chi Square values for the areas of Hearing, Speech, and Behavior. The X^2 value for the vision data approached but did not reach significance ($P < .07$). It was noted that

TABLE V

Chi Square and p Values for

OCR and Examiner Agreement

1976 Validation Study

CHECKLIST	CHI SQUARE VALUE	p
Behavior	4.29	.03
Hearing	11.66	.0001
Health	.254 ns	.70
Speech/Language	3.85	.05
Vision	3.09	.07

TABLE VI
Correlation Coefficients and p Values for
OCR Findings and Examiner Ratings
1976 Validation Study

CHECKLIST	CORRELATION COEFFICIENT	p VALUE LESS THAN
Behavior	.515	.01
Hearing	.584	.01
Health	.507	.01
Speech/Language	.623	.01
Vision	.632	.01

in the Health area the examiner identified irrelevant problem areas (e.g., tubes in ears). Again, had the examiner focused only on health problems as related to the condition of the child at the time of examination, the results might have been significant. Overall, the findings of these analyses indicate a significant rate of agreement between the teacher evaluations using the OCR and the opinions of the expert evaluators, in identifying children with speech, hearing, or behavior problems. The rate of agreement for vision problems was high but nonsignificant.

Further analyses were employed to determine the degree of agreement between the OCR results and the examiners' ratings. Point biserial correlations were performed on the data in the areas of speech, hearing, behavior, and health. These analyses resulted in correlation coefficients ranging from .51 (Health) to .63 (Vision). All of the correlation coefficients were significant at the $P < .01$ level. These analyses indicate that the rate and degree of agreement of the OCR results with expert ratings is significant for the Speech, Hearing, Behavior, Vision, and Health Checklists. These findings establish a high degree of Criterion-Related validity for the Vision, Speech, Hearing, and Behavior Checklists. Once again, the significant correlation coefficient found in the Health and Vision areas coupled with nonsignificant X^2 values suggests that the Health and Vision Checklists are more accurate in discriminating those cases at the extremes of the raters' scale (i.e., #1 "No problem" and #4 "Definite problem." Overall, the results indicate that improvements in accuracy of prediction have been made over the 1975 version of the OCR and that a moderate to high degree of Criterion-Related validity has been established for the entire checklist.

STUDY I AND II - COMPARISONS

A comparison of the results of the 1975 and 1976 Criterion-related validity studies indicates a higher rate of OCR-Examiner agreement in some areas on the more recent study and a lower rate in other areas. There seem to be several plausible reasons for these unexpected findings. First, in the 1975 study, the teachers were trained in the use of the OCR and in the identification of problems in children. In the 1976 study, the teachers were simply given the OCR manual and asked to read it. The training provided in the earlier study may have outweighed the deficiencies in the earlier version of the OCR, thereby increasing the accuracy of identification. Secondly, the examiner screenings in the areas of hearing and vision were more stringent in the 1976 study. In the 1975 study the vision and hearing screenings were conducted by paraprofessionals using relatively crude methods and instruments, whereas the screenings in the 1976 study were conducted by an Audiologist and an Optometrist. The examinations by the professionals were more comprehensive and more thorough than those conducted in the 1975 study. Finally, the screening conducted to identify social/emotional problems in the 1975 study also included the identification of learning problems. Following this study, the Behavior Checklist was divided into two separate checklists to identify behavioral and learning problems. In general it seems as though the 1976 study was a more realistic use of the OCR and employed more stringent methods in confirming the teacher observations than were employed in the 1975 study.

RECOMMENDATIONS FOR FUTURE RESEARCH AND DEVELOPMENT

Several areas for future study have grown out of the validation research on the OCR. While past research on the OCR has confirmed its usefulness in identifying young children in need of referral for specialized examination or testing, it has also provoked questions concerning its applicability to older children and ways to enhance its accuracy in identifying problem areas.

One important question that has not been addressed is: Do teachers who use the OCR make more appropriate and accurate referrals than teachers who do not use the OCR? Based upon previous experience of the project staff and the examiners, teacher referrals are frequently ambiguous statements such as "...is always getting in trouble" or "...doesn't try." However, research is needed to clearly determine whether more accurate and specific identifications are obtained when using the OCR. Another variable that may enhance the accuracy of referrals is the training provided in addition to reading the manual and using the checklists. It might be determined that a trained observer makes more accurate referrals than does an untrained observer. Thus in using the variables of no training, training for general observation, training for observation using the OCR, and use of the OCR with no training, the effectiveness of training with the OCR could be more clearly determined.

Another possibility for future research would be a comparison of parent observations versus teacher observations using the OCR. This would simply be an expansion of the past criterion-related validity studies on the OCR. It might be determined that accuracy of referral can be enhanced by using one or both sets (Parent and Teacher of observations.)

Another possibility for future study of the OCR would be to evaluate the relevance of the OCR to older children. The purpose of this study would be to simply determine the age range where the OCR observations are most appropriate. Conversely, it would be determined at what age the observations are no longer relevant.

It is apparent that a number of studies could be conducted on the OCR. However, at this time it seems to be more relevant to answer questions concerning the expanded use of the instrument, and ways in which the accuracy of the OCR can be further increased.

CONSULTANT REVIEWS

External consultants reviewed the OCR manual and checklists during May and June of 1976. Five consultants were selected on the basis of their particular areas of expertise as related to specific sections of the OCR, and two reviewers were selected because of their experience in rural areas outside of Texas. Following an explanation of the review task, a letter, the manual and checklists, and review instructions were mailed to each consultant. A copy of the letter and the review instructions are included in Appendix B.

Consultants participating in this phase of development and their particular emphasis areas were:

1. Dr. Ernest Gotts, Department of Special Education, University of Texas, Dallas, Texas, who reviewed the manual and checklists for overall applicability to young children.
2. Dr. Natalie Barraga, Department of Special Education, University of Texas, Austin, Texas, who reviewed the manual and checklists with particular emphasis on visual sections.
3. Dr. Frederick Martin, Department of Speech Communication, University of Texas, Austin, Texas, who reviewed the manual and checklists with particular emphasis on the auditory section.
4. Dr. Mary Lovey Wood, Austin Speech and Language and Hearing Center, Austin, Texas, who reviewed speech sections of the manual and checklists.
5. Dr. Linda Gotts, Austin Mental Health/Mental Retardation Center, Austin, Texas, who reviewed the manual and checklists with particular emphasis on the social/emotional sections.
6. Ms. JoAnn Braddy, ARBAC, Box 248, Dardenella, Arkansas, who reviewed the manual and checklists with particular emphasis on the applicability of the OCR to rural areas.
7. Ms. Joy Roye, Kibais Community Action Foundation, Box 473, Stigler, Oklahoma, who reviewed the manual and checklists with particular emphasis on the applicability of the OCR to rural areas.

In addition, Ms. Margaret Emswiler, Child Development and Education Specialist, Department of Health, Education and Welfare, Regional Office, also reviewed the OCR and added suggestions on the manual.

Reviewers were requested to provide written reports in response to the following areas:

1. Suggestions for modifications to the instructional manual.

2. Specific suggestions for additions and/or deletions to the General Checklist which would provide for more accurate referral to the appropriate Specific Checklist.
3. Specific suggestions for additions and/or deletions to the Specific Checklists which would enhance the probability of accurate identification of children having difficulty.
4. Any suggestions which might serve to limit the over- and under-referral rate.
5. A general statement of assessment of specific parts of the OCR and of the measure as a whole. This includes assessment of the need for such a measure and its usefulness in aiding teachers in communicating with professionals in providing referral information.
6. Evaluation of the clarity and readability of the manual as a whole.
7. Any additional suggestions for revision.

The complete written reports from all consultants are included in Appendix C. In several cases, the consultants also wrote in the OCR manual. This information has not been reproduced, but is available from SEDL. Responses to items 1 through 4 and item 7 were reviewed and incorporated into the revised version of the OCR.

Items 5 and 6 provided information on the overall value of the OCR. General comments regarding the usability of the OCR and recommendations for further development, compiled and summarized from the complete reviews for ease of reading, follow.

1. Dr. Ernest Gotts

I am really pleased to see the excellent job of putting together you have done on the OCR... (Memo, Page 1)

...Even the field of special education where teachers are supposed to be highly trained and so forth, seems to skimp on preparing teachers to look for signs of problems. This type of material could be used by a resource or helping teacher to train classroom teachers in early childhood to refer in potential problems. The instructions for the OCR could be stronger in encouraging teachers to insist on recommendations that are relevant for classroom activities and specific enough to be implemented... (Item 5, E. G. Review)

2. Dr. Natalie Barraga

Overall, the OCR should be a very useful tool for teachers of all young children, especially those who have less sophisticated preparation, or those who really do not know what is

normal or unusual in a child's behavior. There is a definite need for such a measure for day care centers, Head Start programs, Early Childhood Education Programs, and even primary teachers in the public schools. My experience indicates that unless workers and teachers have had some special education training, many simply do not know that certain behaviors indicate any type of problem or do not think about anything wrong... Just having the medical terms explained in understandable language will make teachers more comfortable and more willing to make referrals. (Item 5, N.B. Review)

3. Dr. Frederick Martin

In my opinion, this is a well-done pamphlet. Publications of this sort are often overly technical and disinterest the very persons they are trying to reach. You have struck a balance between brevity and detail with no major sacrifice in accuracy, although I am certain that there are purists from each special area who might groan at the oversimplifications (Cover letter, page 1, F. M. Review).

As implied earlier, my general impression of the OCR is favorable...The manual is generally clear and well written. (Cover letter, page 2, response to items 5 and 6, F. M. Review)

4. Dr. Mary Lovey Wood

I am very impressed with the OCR and with the exception of those suggestions I have listed, I have no changes. I would like a chance to see a follow up study after this has been in effect for a year (Item 5, M.L.W. Review).

5. Dr. Linda Gotts

As a result of consultation with various preschools in the Austin area, I see a definite need for a measure such as the OCR which can be used by teachers to identify children who could benefit from special help before they begin to fail in school. It is important, of course, to do this without the stigma of labels, which the OCR successfully manages to avoid.

The information on the checklists should be useful and relevant to the professionals to whom the teachers are referring children. Also, the checklist format provides significant information quickly and is more likely to be read by busy professionals than lengthy written reports.

The ideas in the OCR seem to have been carefully thought out, with the important points emphasized and repeated throughout. There is sufficient detail on the checklists to be helpful but not so much detail that the teacher trying to fill them out will be overwhelmed.

The instructions for each checklist do an adequate job of explaining the various areas covered in the checklist, so that any confusion arising over specific items would usually be clarified by referring to the instructions. In general, the items selected for each specific checklist do a good job of covering the pertinent behaviors or symptoms for that problem area. In short the OCR seems to me to be fairly well polished in its present form.

6. Ms. JoAnn Braddy

The measure seems excellent to me. I would be anxious for this to be used in my program. There is without question a need for such a measure. I particularly like the explanations prior to the specific checklists. It appears to be written in terms that nonprofessional staff could use the measures. I feel very, very positive toward the measures.

7. Ms. Joy Roye

From my experience of directing a Head Start program in a rural area I can state emphatically that there is a need to help teachers recognize the importance of observing individual children and communicate the appropriate information to professionals (Item 1, J.R. Review).

TEACHER FEEDBACK

Teachers from A-Bar-Z Ponderosa Day Care Center and from Riverside Day Care Center in Austin, Texas participated in a validation study of the OCR in June 1976. Each teacher read the manual and completed checklists for the children in her classroom. After the checklists had been completed, the teachers were asked to complete a feedback form on the manual and checklists (see Appendix C).

The first page of the feedback form provided space for the teachers to rate the checklists and manual on a five-point descriptive scale. The following three pages provided space for individual responses to specific questions and suggestions for change.

The information provided by teachers was used, in combination with reviews by external consultants and actual data obtained through the validation study, in making final revisions of the manual and checklists. As the manual and checklist are intended for use by the classroom teacher, all teacher suggestions were most carefully considered in making revisions.

On the following pages, the actual teacher-ratings and verbatim comments are shown for the 15 teachers who returned the forms. Responses were not given to some of the questions, and some of the checklists were not used by some teachers.

FEEDBACK DATA

User ratings of the checklists

CHECKLISTS	Excellent	Good	Average	Poor	Useless
General Checklist	XXXXXXXX	XXXXXX	X		
Health Checklist	XXXXXXXX	XXXXXXXX			
Vision Checklist	XXXXXXXXXX	XXX	X		
Hearing Checklist	XXXXXXXXXX	XXXX			
Speech Checklist	XXXXXXXX	XXXX			
Behavior Checklist	XXXXXXXX	XXXXX			
Motor Checklist	XXXXXXX	XXXXX			
Ease of Administration	XXXXXXX	XXXXX			

User ratings of the manual

MANUAL	Excellent	Good	Average	Poor	Useless
Introductory Chapter	XXXXXXXXXX	XXXXX			
Health Chapter	XXXXXXXXXX	XXXX			
Vision Chapter	XXXXXXXXXX	XXXX			
Hearing Chapter	XXXXXXXXXX	XXX			
Speech Chapter	XXXXXXX	XXXX			
Behavior Chapter	XXXXXXXXXX	XXX			
Motor Chapter	XXXXXXX	XXXX			

USER COMMENTS

Referral Sections (Were sections on pages 11, 17, 22, 28, 37, and 43 helpful?)

-Explaining what kind of doctor helps the teacher talk to the parents. I think they were very clear and would help a teacher in the follow through.

-Yes

-Reminded me of several important points. Am sure it was helpful to parents.

-Yes

-OK

-Yes

General Reliability: (Was the manual easy to read and understand?)

-Yes

-Yes

-I found the manual readable, but I wondered whether or not the parents of WIN children would understand the explanations. Some of them are poor readers and would become frustrated at trying to read all the words.*

(*This refers to the fact that a copy of the manual was given to the parents who indicated an interest in reviewing the manual and checklists. This was done in order to determine whether parents were interested in and the feasibility of developing a parents version of the OCR.)

-Very Easy

-It was easy to read, but I felt I should read it the second time to really understand it.

-Yes

-Yes

-OK

-OK

Illustrations: (Help toward understanding text; Contribution toward format)

-I think the illustrations were very helpful. It's easier to notice something wrong when you have seen it in a picture.

-Yes

-Yes

-Yes; I definitely feel illustrations should be included. They break up pages of explanations and attract your attention immediately. Also, I think they are helpful for some parents.

-OK

-Very helpful

-Yes

Organization: (Was manual clearly organized?)

-Yes, a person could read one section at a time and do the proper things.

-Yes

-Yes

-Yes

-OK

-Yes

Suggestions for change in either checklists or chapters:

1. General

-There needs to be more questions on vision. The question "seems to have trouble seeing" is too general. In a small child, it is hard to tell vision problems.

-I was surprised to see nothing about a child's self-concept.

-No changes

-OK as is

2. Health

-Condition of hair? If there are scars on the body and where?

-I think frequency of bedwetting should be mentioned. Perhaps a space should be provided to record any medications being taken and/or operations such as adenoid, ear, eye, etc.

3. Vision

-No suggestions given by any user.

4. Hearing

-Maybe a question concerning a child covering his ears with his hands as soon as a record begins to play or when singing.

5. Speech

-No suggestions given by any user.

6. Social/Emotional

-Maybe a question about a child being overly possessive to the extent of hiding toys or dividing the toy into parts and hiding the parts in different locations, for example.

-There was no mention of child's insecurity or sensitivity specifically.

7. Motor

-Since quite a few children wear corrective shoes while young, perhaps a statement about it could be included.

Which section(s) was (were) most important to you?

- Health and Speech
- Social/Emotional or Behavioral
- Social/Emotional or Behavioral and Hearing
- Behavioral and Health
- Behavior and Health
- Speech
- Behavior
- Hearing and Speech

Which section(s) was (were) least important to you?

- Fine motor is so new to some three year olds it is hard to tell if they are weak in that area unless it is to an extreme.
- Visual -- I found it hard to evaluate.
- They were all important.

What other tests have you used to screen children for referral?

- The teacher could recognize such things as tantrums, excessive crying, health problems, speech problems, large motor problems, etc. These were discussed with the director and special plans were made for that child.
- None
- None
- General classroom observation
- Nothing

What did you like best about the checklists?

- They were convenient to use
- Well worded and outlined

-After reading the specific checklist, I realized that perhaps some of the children might have belonged there. Maybe if I had used the specific checklists first, or along with the general list, I would have included some children more. I thought they didn't belong.

-I was very impressed with it. It explained very many things that I was not aware of. It was easier for me to make out the checklists. I had more things to look for that I didn't know whether I had really observed before.

-The OCR is very helpful, clear, and seems to cover a large range of problems. The guide is most helpful.

What did you like least about the manual?

-Cannot think of anything I didn't like.

-For parents, the vocabulary -- too much reading for some of them.

-It looks difficult and long but it is not when you read it. You might stress this when giving out the checklists.

-I found it difficult to pinpoint things.

-Nothing

-None of it

-Nothing

What is your overall opinion of the OCR?

-I like the manual and the checklists. I think it will be very helpful if used on a long term basis and with many children. I feel I have been rushed in filling out the checklists. A teacher should spend at least a few days observing each child while she is filling out the checklist.

-I'm glad we were fortunate enough to be able to do the OCR in our school. I know it makes me more aware of watching for certain things in the children and probably did the same thing for parents. I was thrilled to have the children's motor, sight, hearing, etc. abilities checked.

-Generally very helpful, I feel teachers should have some group meeting at the beginning of usage in order to discuss it.

-Very good

-Easy to read, used everyday words which most people can understand.

-That every area was taken into consideration.

-They were easy.

What did you like least about the checklists?

-There didn't seem to be enough places to put "other" and "for example"

-I found it difficult to answer "frequency" questions and to explain situations involved.

-Nothing

-They were vague at times. Just a more detailed form should be available.

What did you like best about the manual?

-I like the illustrations best. They made the problems stand out in my mind and they were easier to look for.

-Illustrations, definitions helpful, clear explanations of what to look for, well organized.

-Helped me know which things to look for (especially in speech, hearing, and vision). I would like to read or study the manual at the beginning of the year and then observe the children and use the checklist.

-I liked all of it. I think it was wonderful.

-It made me study the child more better. A handy checklist in areas in which the child is having difficulty.

-Very helpful, especially the guide which has many points that are useful and good explanations as what to look for.

-It was very helpful, also the explanations are very helpful.

-Convenient to use and helpful.

-I wouldn't know about improvement of the OCR. I would think the guide would be very helpful to all teachers.

-I think it can help beginning teachers or those who have difficulty finding out about problems.

-I very much like having the guide handy, as a quick referral for certain situations. The sources are also good information because sometimes professionals are unavailable. I think it would also be very helpful to re-check the children during the 2nd semester and as a sort of guide for the 1st grade teacher.

Would you recommend the OCR to other teachers?

12 yes responses, no negative responses given

Other Comments:

-Maybe there should be some questions about the sleeping habits of the children.

1. Do they sleep well?
2. Sleep walking.
3. Bad dreams often that result in becoming upset or crying.
4. Fear of closing their eyes.

-There should be a place on each checklist for the teacher to say that none of these things apply to this child.

-In the vision section of the manual (p. 18) it was mentioned that a teacher should know what type of visual screening test will be used so she can prepare the children for it. As the visual screening person can tell you, this was evident in my class. The children did not understand a certain part of the test. I tried to explain and demonstrate what was expected, but they could not grasp the idea or could not coordinate their hands and fingers to point in the direction the E was facing. Perhaps another type of test could be used for the young children (Note: The Titmus Telebinocular test for visual screening was used in this class.)

APPENDIX A
CHECKLISTS
(PILOT TEST VERSION)

Name _____ Date _____
 Observer _____ Birthdate _____
 Age _____
 yr. mo. day
 yr. mo. day
 yrs. mos.

General Checklist

- _____ 1. Is frequently sick or seems to have poor health. (A)
- _____ 2. Frequent colds, sore throat, runny nose, or cough. (A)
- _____ 3. Frequently complains of pain or aches. (A)
- _____ 4. Often seems tired; lacks energy. (A)
- _____ 5. Frequent or extreme hunger or thirst. (A)
- _____ 6. Seems very small or thin; underweight. (A)
- _____ 7. Eyes appear to be red, watery, crusty, or sore. (B)
- _____ 8. Seems to have trouble seeing. (B)
- _____ 9. Seems to have trouble hearing. (C,D)
- _____ 10. Doesn't speak clearly; speech is hard to understand. (C,D)
- _____ 11. Doesn't often talk in class. (C,D)
- _____ 12. Extremely restless all the time; can't seem to stay still. (C,D)
- _____ 13. Does not get along with other children. (E)
- _____ 14. Very easily upset; has tantrums or cries often. (E)
- _____ 15. Has extreme difficulty paying attention and concentrating on what he is doing. (C,D,E)
- _____ 16. Seems unaware of what goes on around him; seems to "live in his own world." (E)
- _____ 17. Acts like a much younger child; seems very slow for his age. (E,F)
- _____ 18. Seems fearful, anxious, or tense much of the time. (E)
- _____ 19. Seems unusually clumsy or awkward. (F)
- _____ 20. Stands, sits, or walks in an unusual way. (F)
- _____ 21. Cannot work with toys or play games as well as other children his age. (E,F)
- _____ 22. None of the above items describe this child.

May 1976

Name _____

Date _____

Observer _____

A. Health Checklist

1. General physique

- _____ Extremely overweight
- _____ Extremely underweight
- _____ Sudden loss of weight
- _____ Uncoordinated, clumsy
- _____ Other _____

2. Skin condition

- _____ Very pale complexion
- _____ Dark circles under eyes
- _____ Itching or rash. Where? _____
- _____ Sores. Where? _____
- _____ Wounds or injuries. Where? _____
- _____ Cuts and bruises slow to heal
- _____ Other _____

3. Head and mouth

- _____ Lice
- _____ Sore throat
- _____ Bad teeth
- _____ Runny nose
- _____ Other _____

4. Limbs and extremities

- _____ Deformity. Explain _____
- _____ Bluish tinge to nails
- _____ Other _____

5. Signs of illness

- _____ Excessive fatigue
- _____ Fever
- _____ Other _____

6. Complaints or reports of distress

- _____ Headaches
- _____ Stomachaches
- _____ Body pains. Where? _____
- _____ Earaches
- _____ Other _____

7. Breathing

- _____ Mouth breathing
- _____ Difficult or wheezy breathing
- _____ Shallow, rapid breathing
- _____ Coughing
- _____ Other _____

8. Diet and eating

_____ Seems to be getting a poor diet. Explain _____

_____ Excessive hunger
_____ Excessive thirst
_____ Poor appetite
_____ Protruding stomach
_____ Eats non-foods. What? _____
_____ Other _____

9. Restroom behavior

_____ Frequent bowel movement
_____ Frequent or painful urination
_____ Vomiting
_____ Other _____

10. Overall health seems to be

_____ Improving
_____ Getting worse
_____ Same

Name _____

Date _____

Observer _____

B. Vision Checklist

1. Seems to have something wrong with eyes

- _____ a. Red, swollen eyelids
- _____ b. Crusts or sores on eyelids
- _____ c. Red, watery or cloudy eyes
- _____ d. Drooping eyelids
- _____ e. Complains of pain in eyes
- _____ f. One eye "wanders"
- _____ g. Eyes "cross" toward nose
- _____ h. Other _____

When does the problem occur? _____

2. Seems to have trouble seeing

- _____ a. Rubs eyes
- _____ b. Does not focus his eyes
- _____ c. Does not look at work
- _____ d. Leans very close to work
- _____ e. Squints
- _____ f. Tilts head or closes one eye
- _____ g. Bumps into things; trips over objects
- _____ h. Lifts books and pictures off table to see at an angle
- _____ i. Other _____

When does the problem occur? _____

3. Associated problems

- _____ a. Frequent colds, allergies
- _____ b. Headaches
- _____ c. Other _____

Name _____

Date _____

Observer _____

C. Hearing Checklist

1. Condition of ears

- _____ a. Complains of earaches
- _____ b. Tugs or pulls at ears
- _____ c. Drainage from ears
- _____ d. Excessive wax or dirt in ears
- _____ e. Other _____

When does the problem occur? _____

2. Hearing

- _____ a. Does not listen
- _____ b. Has trouble following directions
- _____ c. Seems to have trouble understanding
- _____ d. Uses gestures instead of talking to communicate
- _____ e. Does not respond when spoken to from behind or from across the room
- _____ f. Does not react to sudden noises
- _____ g. Watches speakers' face very closely
- _____ h. Asks for frequent repetitions (Huh? What?)
- _____ i. Speaks very softly or in a monotone
- _____ j. Unusually loud voice
- _____ k. Turns head to one side or other
- _____ l. Other _____

When does this problem occur? _____

3. Associated problems

- _____ a. Frequent colds, sore throats, etc.
- _____ b. Speech problems
- _____ c. Dizziness
- _____ d. Reports of ringing or whistling in ears
- _____ e. Other _____

May 1976

Name _____

Date _____

Observer _____

D. Speech Checklist

- _____ 1. Mispronounces certain sounds. Which ones? _____
- _____ 2. Mispronounces certain words. Which ones? _____
- _____ 3. Speech cannot be understood
- _____ 4. Leaves sounds off the ends of words
- _____ 5. Omits most consonant sounds
- _____ 6. Tongue sticks out when talking
- _____ 7. Frequently repeats himself on words or phrases
- _____ 8. Frequently repeats sounds or syllables
- _____ 9. Many interjections (uh, mm, etc.)
- _____ 10. Speaks very slowly
- _____ 11. Speaks very fast
- _____ 12. Starts to say something but stops as if looking for the right word
- _____ 13. Seems bothered by his speech problem
- _____ 14. Voice is:
- | | |
|----------------------|------------------------|
| _____ a. hoarse | _____ d. nasal, whiney |
| _____ b. soft, quiet | _____ e. other _____ |
| _____ c. too loud | _____ |
- _____ 15. Has trouble understanding what is said to him
- _____ 16. Has trouble expressing himself
- _____ 17. Talks very little or not at all
- _____ 18. Talks like a much younger child
- _____ 19. Other _____
- _____ 20. Associated problems
- | |
|---------------------------------------|
| _____ a. hearing problems |
| _____ b. frequent coughs, colds, etc. |
| _____ c. missing teeth |
| _____ d. other _____ |

Name _____

Date _____

Observer _____

D. Speech Checklist
English/Spanish

- _____ 1. Mispronounces certain sounds. Which ones? _____
a. English _____ b. Spanish _____
- _____ 2. Mispronounces certain words. Which ones? _____
a. English _____ b. Spanish _____
- _____ 3. Speech cannot be understood: a. English _____ b. Spanish _____
- _____ 4. Leaves sounds off the ends of words: a. English _____
b. Spanish _____
- _____ 5. Omits most consonant sounds: a. English _____ b. Spanish _____
- _____ 6. Tongue sticks out when talking: a. English _____ b. Spanish _____
- _____ 7. Frequently repeats himself on words or phrases: a. English _____
b. Spanish _____
- _____ 8. Frequently repeats sounds or syllables: a. English _____
b. Spanish _____
- _____ 9. Many interjections (uh, mm, etc): a. English _____ b. Spanish _____
- _____ 10. Speaks very slowly: a. English _____ b. Spanish _____
- _____ 11. Speaks very fast: a. English _____ b. Spanish _____
- _____ 12. Starts to say something but stops as if looking for the right word
a. English _____ b. Spanish _____
- _____ 13. Seems bothered by his speech problem
- _____ 14. Voice is:
_____ a. hoarse _____ d. nasal, whiney
_____ b. soft, quiet _____ e. other _____
_____ c. too loud _____
- _____ 15. Has trouble understanding what is said to him: a. English _____
b. Spanish _____
- _____ 16. Has trouble expressing himself: a. English _____ b. Spanish _____
- _____ 17. Talks very little or not at all
- _____ 18. Talks like a much younger child
- _____ 19. Other _____
- _____ 20. Associated problems
_____ a. hearing problems
_____ b. frequent coughs, colds, etc.
_____ c. missing teeth
_____ d. Other _____

Name _____

Date _____

Observer _____

F. Motor Checklist

- _____ 1. Poor or unusual posture
- _____ 2. Walking
- _____ a. pigeon-toed; turns toes in
- _____ b. turns toes out
- _____ c. walks on tiptoes much of the time
- _____ d. stumbles or falls
- _____ e. walks stiff-legged
- _____ f. Other _____
- _____ 3. Does not alternate feet going up or down stairs
- _____ 4. Runs or jumps with unusual difficulty
- _____ 5. Apparent weakness of muscles
- _____ 6. Twitching or jerking movements
- _____ 7. Trembling or shaking
- _____ 8. Complains of pain after physical exercise
- _____ 9. Fine motor
- _____ a. Has trouble picking up small objects
- _____ b. Cannot stack eight 1-inch cubes
- _____ c. Cannot work preschool puzzles
- _____ d. Has unusual trouble using crayons
- _____ e. Other _____
- _____ 10. Missing or deformed limb(s)
- Which? _____
- Describe _____
- Other _____

Name _____

Date _____

Observer _____

E. Behavioral Checklist

(Write on back of paper if necessary.)

- _____ 1. Crying or tantrums (circle one or both)
 a. In what situations? _____
 b. How often? _____
- _____ 2. Withdrawal
 a. In what situations? _____
 b. How often? _____
- _____ 3. Restlessness
 a. In what situations? _____
 b. How often? _____
- _____ 4. Problems getting along with other children
 a. Hits or fights physically with other children
 b. Yells or calls names
 c. Does not cooperate; bothers or interferes with others
 d. Avoids other children; does not interact with them
 e. Other _____
- _____ 5. Problems getting along with adults
 a. Avoids adults; does not interact with them
 b. Clings to adults
 c. Hits or fights with adults
 d. Demands constant attention from adults
 e. Other _____
- _____ 6. Always plays by himself
- _____ 7. Destructive behavior
 a. Tries to hurt himself
 b. Tries to break objects and toys
 c. Tries to hurt other children
- _____ 8. Frequent changes of mood
 How frequent? _____
 In what situations? _____
 What happens? _____
- _____ 9. Nervous habits
 a. Puts hands or fingers in mouth a great deal
 b. Fidgets or "fiddles" with hands, small objects, clothing, etc.
 c. Other _____
- _____ 10. Very slow in speech and language development, motor skills, social behavior, and learning development
- _____ 11. Other learning problems _____

APPENDIX B
INSTRUCTIONS FOR CONSULTANTS



Southwest Educational Development Laboratory
211 East 7th Street, Austin, Texas 78701 • 512/476-6861

May 17, 1976

Dear:

Enclosed is one copy of the Observational Checklists for Referral (OCR) and a brief synopsis of the OCR, previous statistical results, and our expectations concerning your review.

As the OCR has been used by teachers and has been reviewed previously, we plan this review to be the final consultants input on this measure. We hope that the OCR will be ready for publication in the fall and would appreciate your analysis of both its content and its usefulness.

Thank you very much for aiding us with this project.

Sincerely yours,

Joyce Evans, Ph.D.
Director, Special Projects

JE:kd

Enclosures

OBSERVATIONAL CHECKLISTS FOR REFERRAL

Information for Consultants

The Observational Checklists for Referral (OCR) is being developed as a guide to assist preschool teachers in observing and identifying children who need to be referred for professional evaluation. It is designed to aid the teacher in making referrals and to facilitate communication between the teacher and the professional.

The OCR consists of an instructional manual for the teacher, a General Checklist to be completed for all children in the classroom, and six specific Checklists to be completed on all children who have been identified as having some difficulty on the General Checklist.

The OCR manual includes specific, detailed instructions for completing each checklist, a general discussion of each Specific Checklist and the problem area it is designed to identify, descriptions of common behavioral manifestations of those problems and guidelines for making and following up referrals. Observational skills and techniques are explained, as well as descriptions of the specific behaviors the teachers should note in each child.

Explanations and descriptions are written in nontechnical language for use by paraprofessional as well as professional Head Start and Day Care teachers. The language used throughout the manual is, therefore, designed for the reader who has not had extensive training in education, observational techniques, or screening procedures.

The General Checklist contains items which are designed for initial identification purposes. They are designed to cover, in broad terms, common visible or behavioral symptoms of problems in young children. Each item on the General Checklist relates to one or more items on Specific Checklists. The Specific Checklists describe unusual behaviors or physical symptoms in greater detail. The Specific Checklists, when completed, can provide information about the child's classroom behavior which leads to an appropriate referral for a more comprehensive evaluation by other professionals.

A pilot validation study was conducted in order to compare teacher-administered OCR results with screening evaluations performed by external consultants and SEDL staff members (clinical child psychologist, educational diagnostician, pediatrician, speech therapist, and nurses). There were 87 children involved in this study, of whom various numbers had follow-up screening by the professionals. Preliminary analysis attempted to determine the over- and under-referral rates for each checklist. Over-referral was defined as a positive checklist rating and a negative screening rating following professional examination, and under-referral was the opposite. The OCR Motor Checklist (N=71) had a 12.7% over-referral and a 1.4% under-referral rate. The Speech Checklist (N=74) yielded a 10.8% over-referral and a 12.1% under-referral

rate. The Hearing Checklist (N=58) produced a 19% over-referral and a 5.2% under-referral rate. The Health Checklist showed a 14.1% over-referral and a 29.6% under-referral rate. The Behavioral Checklist (N=22) showed a 4.5% (one child) over-referral and a 22.7% (five children) under-referral rate.

The staff of the Ability Development Project would like to see these percentages brought within a more limited range. A large number of over-referrals would tend to discourage the professionals who are performing diagnostic evaluations as well as increasing the cost to the schools or parents of the children for no beneficial purpose. A large number of under-referrals would, of course, defeat the purpose of the OCR as a screening device as children who are in need of attention would not be identified. In this framework it is definitely better to have a moderate over-referral rate than even a mild under-referral rate.

It is our hope that as a consultant reviewing the OCR, you will contribute the following information:

1. Suggestions for modifications to the instructional manual.
2. Specific suggestions for additions and/or deletions to the General Checklist which would provide for more accurate referral to the appropriate Specific Checklist.
3. Specific suggestions for additions and/or deletions in the Specific Checklists which would enhance the probability of accurate identification of children having difficulty.
4. Any suggestions which might serve to limit the over- and under-referral rate.
5. A general statement of your assessment of specific parts of the OCR and of the measure as a whole. This includes your assessment of the need for such a measure and its usefulness in aiding teachers in communicating with professionals in providing referral information.
6. Your evaluation of the clarity and readability of the manual as a whole.
7. Any additional suggestions for revision.

We feel that there is a definite need for a screening device which has reliability and validity, and can be used by certified and non-certified teachers. At the present time no such device exists which deals with all the major areas of potential dysfunction which might impair the learning ability of the child. Of the screening devices which are used, all are designed for use by professionals and are usually for use by persons with professional training in that area (e.g.: medical screenings, speech screenings, etc.). The OCR is designed for persons with no knowledge in the specific screening area. It must, therefore, rely on

the observer to note specific behaviors and not on an underlying understanding of the cause of the symptoms. If it meets this objective then it should be of benefit to all who work with young children including those to whom children are referred.

APPENDIX C
CONSULTANT REVIEWS

TO: DR. JOYCE EVANS
FROM: Ernest Gotts
RE: OCR Review

Enclosed you will find:

1. Consultant Form
2. Note pad and a few additional pages of comments, recommendations, and so forth.
3. The OCR copy with comments written in the text.
4. The consultant information sheet. (with comments)

I am really pleased to see the excellent job of pulling together you have done on the OCR. Though it may seem that I have marked a great deal, most comments are not related to major problems. If I may be of further assistance or may clarify anything for you, please call me.

Review of OBSERVATIONAL CHECKLISTS FOR REFERRAL
by Ernest Gotts, Ph.D.

1. Suggestions for modifications to the instructional manual.

Page 1 In the paragraph, "The importance of the teacher in early identification" the term professional is used. This may be a red flag word since you seem to aim this at teachers who do not hold professional degrees or certificates also. Is there a way to word this so as not to offend?

In the paragraph, "The importance of early identification" You have used the term, visual impairment, here in a way that is unusual for the field. In general, visual problems such as refractive errors or amblyopia which may be corrected through prosthesis or exercise are not called impairments. The terms, impairment and disability are reserved for use when all possible correction has already been made and some interference with function is still evident.

Pages & 2 In the paragraph, "How you can help in early identification" The subheadings under this section do not conform to usual practice in education and psychology. This level subheading is usually indented as for a paragraph and underlined as you have done.

Page 2 For What age child is this checklist intended? Young child is first mentioned on page two and is left vague (i.e., not defined). If it is intended for a specific age range, that information could be included on page 1 in the first sentence as follows:

"The purposes of the OCR are to assist teachers in identifying preschool aged (and elementary) children who may have problems..."

Throughout, the OCR refers to school - do you wish to imply that a Head Start center or a day care center would not also find this useful? It is awkward to do so, but perhaps every where school is found it should read school or early childhood center.

For third full paragraph, I suggest you add as indicated on marked copy, "or what you have noticed about his behavior that is unusual and..." "referral person" is an awkward term. How about, "professional worker" or "expert."

Following Through on Referrals

I would prefer to see the...

"it is important that you know followed by what recommendations have been made to help you work with the child and what the nature of the problem is if special attentiveness is needed on your part. If the recommendations are not clear to you, you should ask for help in understanding them."

- TO: 1. De-emphasize what might be an interest in the label of the problem
2. Encourage follow through when recommendations are vague, too wordy, etc.

Also, same paragraph:

extra lighting should read "special lighting."

Mention of resource teacher in this paragraph. This is not followed up elsewhere in the OCR or maybe it should be.

Comment regarding computation of the CA

Page 3
Why was the computational procedure not explained on page three? I do not feel the explanation was so long that it could not have fit there as well as being appended.

In the General Checklist instructions third full paragraph:

I feel it would be helpful to include here an explanation of the letter following the item of the General Checklist.

Other wording changes for page 3 are included on the page itself.

2. Comments on the General Checklist itself.

1. Why not include a space for identifying the school or center?
2. Suggest you add item "Has lots of bruises and/or sores on arms, legs, or other body parts." (A)
3. Suggest you add item to the effect that: "Behavior varies markedly from day to day." (E)
4. Suggest you add items: "Shakes or trembles after" (Z)
"Often stares blankly into space or nods head and stares or smacks lips and stares into space." (A)

3. Suggestions Regarding the Instructions for the Specific Checklists

In the first paragraph:

Page 5
Reference here the previous comment. The explanation of how to use the letters which follow items of the General Checklist comes after the General Checklist itself has been discussed and left behind.

Page 7
In same paragraph:

In enumerating the checklists, the word, checklist, is included with Behavioral inconsistently since it is left off for the Hearing - Speech - Motor ones.

In paragraph 2:

The antecedent of they (as marked in text) is not clear. I suggest you start the sentence, "The specific checklists..."

Paragraph 3:

Is a caution against sending the only copy necessary?

In the first narrative paragraph:

The minor but potentially damaging illnesses run together with the severe, disabling diseases.

Perhaps you should consider using an expression other than "recur" maybe - which breaks out again and again -

First full paragraph:

I wonder how the word "abused" will be taken by users -- it could mean sexually molested to some. Would the term "beaten" be more accurate and most likely to communicate?

I suggest you add to paragraph 1 (page 9) an admonition to observe Scratching behavior.

Paragraph 2

"Another indicator of lice" is used without making clear what the first indicators was. Suggest that they watch for scratching of the scalp or nape of the neck.

Something is wrong with the statement about tooth decay. Was a line left out?

I think that these general directions for the health checklist should include reference to impetigo and to pus - bearing sores.

For inspection of hands, suggest observation for hangnails of symptoms of petit mal and psycho motor seizure disorders would be appropriate.

For second full paragraph on page 10.

Could add: "Children of ten communicate illness by their crankiness, extreme sleepiness at an unusual time, dopy demeanor, and so forth."

In last paragraph of page 10

Suggest you admonish them to observed for scratching of anal area - pin worms

Page 11 Suggest you add to paragraph on "Follow Through"

"Never give a child any kind of medication (even aspirin) unless instructed to by the parents and with written schedule and amount from physician."

On the Health Checklist Form

Item 4: Is the word, deformity, at the appropriate reading level
(Physical defect, abnormality)

Item 9

Suggest you add: "Scratching."

Page 15 Vision Checklist Instructions:

Same comment on the term "visually impaired" as on page 1.

You may wish to add to the narrative paragraph on page 13 comments concerning the child who needs corrective lenses. - distorted or fuzzy, blurred vision - who squints to compensate.

Page 16 Comments are written in text and seem self explanatory.

Comments written in text.

1. Refer reader to previous page which illustrates the Snellen chart.
2. After "...left, right, up, or down." add "They can do this by turning the fingers on their hand in the same direction as the "legs" of the E."

Page 19 Ignore comment on headaches. Consider nausea under associated problem - muscle imbalance and eyes can cause this.

On page 21:

Would it be appropriate to suggest referral to a public health nurse as an alternative on all of these physical and sensory problem checklists?

On page 22

Do you want to add nausea to dizziness as a symptom of ear problems?

On page 25

Hearing Checklist

1. Condition of the ears: Suggest you add "Scratches at ears."

On page 25

3. Associated problems

Suggest you add: Signs of Frustration - Temper tantrum
Irritability
Hyperactivity
Distractibility

On page 27

Corrections and comments in text.

On page 28

In the first full paragraph the sentence "Remember that the child's first language etc..." seems vague or unclear to me.

On page 29

I suggest that you add the sentence as indicated in the text.

On page 30

I suggest that you add under #20, Associated Problems (e) "breathes through mouth."

On page 35

My most serious questions about any checklist relate to the one in behavior:

I feel that the lead-in material should be more detailed on this particular checklist since this is the area where the signs are most easily confused with normal behavior.

Under "What to look for" you could have

Excessive - in terms of frequency or degree

fear	crying
anger	touchiness
crying	changeability or moodiness
likes	sadness
dislikes	distructiveness
possessiveness	day dreaming
whininess	fantasy
masturbation	rocking
happiness	

Trouble with: Adults and/or children
Paying attention
Sitting or Standing Still
Impulse Control
Toleration of Frustration

Aggression
Demanding attitude
Tantrums

On page 35

The word coping, I feel is a middle class high-school educated or above term - Suggest you use handling or dealing.

Under making observations paragraph

Suggest insert after first sentence: "That is, we will see them in all children at some time or another."

On page 37

Comments in text.

On page 42

Comments in text.

On page 43

Comments on page in text.

On page 45

In enumerating the various items the form of the expression switches again and again. Suggest a standard format.

walking
Suggest under ^ you add: "Shuffles, scuffs, or drags feet."

Comments on the appendix and Table 1 are written on the text material.

4. Suggestions concerning minimization of the over- and under-referral rate.

I feel that the data you quoted concerning referral rates are not at all bad for this kind of instrument. With some of the additions or clarifications suggested in this round of review it should improve a little. A training package to go with the item which presented perhaps more detail and provided opportunities for reading and discussion might help teachers to use the OCR more effectively and thus to improve the under-referral over-referral situation.

5. I feel that with the suggested changes and careful technical editing that the OCR is getting the the General Instruction, Instructions for the General Checklist, the General Checklist, the Instruction for the Specific Checklists, and all of the Checklists (with perhaps the exception of the Behavioral Checklist) are quite strong. The behavioral checklist may be the most problematic for what is needed is specificity of reference to behaviors and at the same conciseness so as not to make the checklist too lengthy or too cumbersome to use.
- Actually, you could style this as a two step screening procedure for use in classrooms by teachers. I feel there is a real need for this kind of comprehensive look at children which avoids a testing approach per se but suggests how the information needed to complete checklists can be collected on an ongoing basis by the classroom teacher.

Even the field of special education where teachers are supposed to be highly trained and so forth seems to skimp on preparing teachers to look for signs of problems. This type of material could be used by a resource or helping teacher to train classroom teachers in early childhood to refer potential problems. The instructions for the OCR could be stronger in encouraging teachers to insist on recommendations that are relevant for classroom activities and specific enough to be implemented. For the lead-in to the Behavioral Checklist -- the possibility that the professionals who report back to the teacher may recommend that the teacher observe the child in certain specified areas and report back to them at a specified time prior to making any kind of decision about the exact nature of the problem or about how to approach dealing with the problem.

6. Clarity and Readability:

I have to give the OCR an overall strong rating for clarity and readability. After the current round of editing it should undoubtedly be even clearer and more readable.

7. Other Suggestions not regarding the OCR itself. But I do suggest that a training package be developed to accompany the OCR so that supervisors, helping teachers, and so on may have a resource for introducing the OCR to their teachers.

Review of Observational
Checklists for Referral

1. Generally, the instructions are well written and easily read. In each section it might be well to repeat that most children show some of behaviors at one time or another, and that only those behaviors which occur over and over should be checked. This may help to cut down on some of the over-referrals.
2. Might add after 8: "Doesn't like to do things which require him to look closely. Nos. 12 and 15 - add B in parenthesis.
3. Page 15 - add to first sentence, "or he may get tired easily when he is trying to do any of these things." 16, 17, 18 -well done
Page 19 - Under 3 add: "Becomes restless after few minutes when doing any close work".
4. As I said under No. 2 repeated caution that most or all preschool children exhibit some of the behaviors occasionally, and that only those which happen repeatedly should be checked.

For under-referrals, might suggest the teacher keep the checklists in view or refer to them weekly to refresh the things to look for. Might also suggest they work on this over a period of several weeks before making referrals, rather than trying to do it for all children in a few days or a week.

5. Overall the OCR should be a very useful tool for teachers of all young children, especially those who have less sophisticated preparation, or those who really don't know what is normal or unusual in a child's behavior. There is a definite need for such a measure for day-care centers, Head Start programs, Early Childhood Education Programs, and even primary teachers in the public schools. My experience indicates that unless workers and teachers have had some special education training, many simply do not know that certain behaviors indicate any type of problem, or do not think about anything wrong.

Just having the medical terms explained in understandable language will make teachers more comfortable and more willing to make referrals.

6. The readability and clarity of the manual is quite satisfactory. I invited a friend who had no college course work nor any real knowledge of children to read it and the comment was: "even I can understand those words".
7. Do you need both pages 31 and 33? Page 49 - Under State Agencies: add Texas Education Agency, Division of Special Education.

Frederick N. Martin, Ph.D.
CONSULTING AUDIOLOGIST
8613 Silver Ridge Drive
Austin, Texas 78759

May 25, 1976

Joyce Evans, Ph.D.
Director, Special Projects
Southwest Educational Development Laboratory
211 East 7th Street
Austin, Texas 78701

Dear Dr. Evans:

Thank you for the opportunity to review your OBSERVATIONAL CHECKLISTS FOR REFERRAL. I have read this document through several times and hope that my comments will be useful to you.

In my opinion this is a well-done pamphlet. Publications of this sort are often overly technical and disinterest the very persons they are trying to reach. You have struck a balance between brevity and detail with no major sacrifice in accuracy, although I am certain that there are purists from each special area who might groan at the oversimplifications.

Specific comments will follow as outlined in page 2 of your Information for Consultants.

1. As stated above the manual is well-written and succinct. You might wish to consider a brief glossary of terms which are deemed unusual for the reader. This would require some slight paraphrasing and need not run more than a page or two.

2. No suggestions for general checklist.

3. The only checklist I have commented on is the one on hearing, since I only feel qualified in this area. I am certain your other consultants may find some reasons for change in their specific disciplines. The comments on the hearing section are appended to this letter on separate sheets.

4. On the matter of under- and over-referral. The data you show indicates that the population thus far has been rather small. When it grows larger you might generate a tetrachoric table and perform a chi square to determine your hits and misses with respect to referral. For example, select

Frederick N. Martin, Ph.D.
CONSULTING AUDIOLOGIST
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Austin, Texas 78759

a group of children at random who have been in one of your programs and do a complete hearing test on them. I am sure we can set up some arrangement for this. The number 100 always works nicely in such cases. In this way you can determine the per cent who failed who should fail, who passed who should pass (hits) and those who passed who should fail and failed who should pass (misses). Our humanitarian instincts (and your information to consultants) tell us it is better to over-refer than to under-refer. In the hard light of day most programs are judged by their efficiency, which is usually defined in terms of money, personnel, equipment and time. In such cases accuracy and efficiency appear to be inversely related since the more children whose hearing you attempt to screen the looser your criteria are for a "pass" and the more likely you are to misjudge. If you tighten up on your criteria your efficiency goes down.

5. As implied earlier, my general impression of the OCR is favorable. My comments are limited to the hearing section specifically.

6. The manual is generally clear and well written.

7. I have no general suggestions for revision of the manual but do have this comment with respect to the hearing checklist, although I did not include it in my review of the pages on this subject. You have nowhere tried to identify the child with auditory processing problems who have normal hearing sensitivity. One of your teachers or paraprofessionals might suspect a hearing problem in a child who tests out normally. It is sometimes a mistake to shrug this off as an over-referral for the child may need a special form of help and the earlier in life he gets it the better off he is. A word of advice in your manual could be very useful on this subject.

Once again, thank you for allowing me the opportunity to read your manual. If you wish to discuss this report further I would be most pleased to speak with you. This is a fine project which should prove to be very worth-while.

Sincerely,

Frederick N. Martin
Frederick N. Martin

COMMENTS ON
Hearing Checklist Instructions

Comments refer to items numbered in the left hand margin.

1. I would suggest a different ordering of "Where to refer," along with reasons for referral.
 1. Speech pathologist or school nurse (for screening). If there is some uncertainty about hearing loss or on a routine screening basis.
 2. Audiologist: professional who tests hearing and manages hearing impairment. If a hearing loss is probable.
 3. Otologist or otolaryngologist: Physicians who specializes in medical problems of the ear.
If an infection or other medical problem is suspected.
2. In this section there is an implication that a child with a mild hearing loss might not hear a car horn, etc. This is unlikely in mild problems but might suggest a severe loss.
3. At the end of the next-to-last sentence I would add allergies to colds as a cause of ear infections in children. This is a prime cause, especially in parts of Texas like Austin.
4. I would change "...you will not be able..." to "...you may not be able..."
The more positive statement might mislead the nonprofessional.
5. In this section the subject seems to be the severely hearing-impaired child. Such children show an interest in sounds when it is audible to them.
6. Modify sentence slightly to read "...children have speech or voice problems..."
7. Add allergies again: "Frequent colds, allergies and..."
8. Change "...in fact, any child with..." to "...in fact, every child with..."
9. Add a few words: "...may experience dizziness, unsteadiness or clumsiness."
10. Add a definition for portable audiometer, such as "A device which is capable of generating a variety of tones at different strengths to test hearing sensitivity with a pair of earphones fitted to the child's head."
11. "Set" is misspelled.
12. M.D. in parens can be deleted after "medical doctor".
13. My bias shows here but I believe more should be said about the audiologist. He/she is a person with special graduate training in the management of all non-medical aspects of hearing impairment including the selection of hearing aids, auditory retraining, lipreading and counseling.

14. Seating the child close to the teacher's desk is not always the best thing. He/she should be seated near the front of the room so that any natural light through windows will be at his back and on the face of the teacher. If he/she wears an ear-level hearing aid the aided ear should face the class. If a body-type hearing aid is worn the preference again should be for an ideal seat with respect to the light.
15. It is important to add that many children have normal hearing in some ranges of sound but poor hearing in others. For example, it is not uncommon to find a child who responds well to low-pitched sounds but not to high pitched sounds. Such children are often misdiagnosed as they appear to respond to sound, especially to speech because they hear the vowel and nasal components but miss many of the high pitched whispered consonants. Such children often have language or speech disorders and appear to hear without always understanding what they hear.

A not uncommon problem among children is severe hearing loss in one ear. The child who does all his/her listening with one ear does satisfactorily in quiet surroundings but may have difficulty in understanding speech under difficult listening conditions, such as in the presence of background noise. These children also have difficulty in localizing the direction of sound.

16. c. Drainage or strong odor from ears.
17. l. Appears inconsistent in hearing.
m. Difficulty in localizing sound.
n. Other _____
18. e. Changes in behavior after absence or illness.
f. Other _____

G. Hearing Checklist Instructions

What to look for:

1. Signs of earaches
2. Behaviors that may indicate hearing loss

Where to refer:

1. Speech pathologist or school nurse (for screening)
2. Otologist or otolaryngologist: physicians who treat ear problems
3. Audiologist: professional who tests hearing.

Children learn to speak and understand language through hearing. Through language they learn about the world and their place in it. Children with even a mild hearing loss, may miss much of what is said and much that happens in the world around. They may not learn to identify sounds, and often do not understand directions. A child with a hearing loss may not hear you when you call, nor hear the horn of a car coming up the street. Good hearing is essential if a child is to learn and function at home and at school, but often the hearing-impaired child is not identified because no one has noticed the behaviors that show he is having problems.

Making observations. The first section of the Hearing Checklist refers to the condition of the child's ears. However, most of the hearing mechanism is not visible; so you must rely on behavior, such as pulling on the ears or complaints of earaches. Frequent colds are a health problem which may also cause ear infections and damage the ears, resulting in a hearing loss. But unless the ears are actually draining you will not be able to tell much about them.

By checking the behaviors listed in Section 2, you can observe effectively for hearing problems. Observe the child during activities in which he must listen, such as following directions repeating rhymes, and listening to stories. Does the child turn toward you when you call his name softly? What does he do when there is a sudden loud noise? He may not hear it at all, or he may become extremely excited because he did hear it. A loud sound may frighten a child who is used to silence. During music or story time he may not pay attention at all and disrupt the class because he cannot hear the music or story. Watch what the child does when you talk directly to him; many hearing-impaired children will watch the speaker's face very closely and respond to facial expressions and gestures instead of responding to what is said. Because hearing loss interferes with communication, you will want to observe the child when he is speaking. Many hearing-impaired children have speech problems because they do not hear well enough to learn good speech. Others will speak very little and will use gestures to communicate. The child with a hearing loss may also be extremely overactive and easily distracted; these are behaviors that you may notice right away because they present a problem to you. You need to observe the child very carefully when this happens, to see if you can tell whether he has a hearing loss or some other problem. Frequent colds and other upper respiratory infections can affect the ears as well



The hard-of-hearing child may not pay attention because he can not hear.

- 8 as the nose and throat. As mentioned earlier, many hearing-impaired children have speech problems; in fact, any child with a speech disorder should be checked for possible hearing loss. Because the ears are important to balance as well as hearing, the child with ear problems may experience dizziness. Other associated problems might include unusual voice quality or a family history of hearing impairment.

- 9 Making referrals. The Checklist for Hearing Problems is not a substitute for a hearing screening which is usually done by the school nurse or speech pathologist. A portable audiometer and earphones are commonly used for hearing screening. You can prepare the children for hearing screening by putting out a set of earphones for them to try on. During hearing screening, the children are usually asked to raise one hand when they hear a sound. Teach the children to raise one hand when they hear sounds and to lower the hand when the sound stops. Find out exactly what procedure the hearing screener will be using and tell the children what to expect. Give the screener copies of the completed hearing checklist so he will know which children seem to be having problems.

- 12 If a child fails the hearing screening, a referral should be made for further examination. An otolaryngologist is a medical doctor (M.D.) who specializes in diseases of the ear, nose, and throat. An otologist, who



- 13 also a physician, specializes in diseases of the ears only. Any child with suspected ear disease should be seen by a physician. If there is no ear disease but you suspect a hearing loss, the child should be examined by an audiologist, a professional who tests hearing and hearing skills and recommends hearing aids and special auditory training. The child should not be referred to a hearing aid dealer who is trained to fit and service hearing aids but not to examine the ears or test hearing adequately. Send completed checklists on the children you refer to the physician or audiologist. He will then know about unusual behaviors that you have observed in the classroom.

Following through. You will want to get information from the person who examined the child. Ask how severe the child's hearing loss is, whether both ears are affected, and how the child's classroom abilities are affected. If the child is to wear a hearing aid, ask how long he should wear it each day, and see that he does, and that it is on and operating properly. The audiologist or hearing aid dealer can tell you about the hearing aid, how it works, and what to do in case of difficulty. If the child falls behind the other children, either in language or learning development, seek advice from a trained teacher of the deaf or a speech pathologist. The hearing-impaired child may need additional help from these professionals.

- 14 In the classroom, seat the child where he is close to the speaker and can see easily. Let him see your face when you speak, but speak in a normal voice; speak clearly but without exaggerating. Use pictures and gestures to help the child understand what you are saying.

15

If you must repeat something for the child, rephrase it and say it in a slightly different way. Encourage the hearing-impaired child to try and do not correct his speech; he may become discouraged and avoid speaking. Be very sure you have the child's attention before you begin to speak to him. Remember that the child with a hearing loss may not hear words of praise; praise him often with smiles, pats, and hugs as well as words.

Name _____

Date _____

Room _____

C. Hearing Checklist

1. Complaints of ear ears

a. Complaints of earaches

Pugs or pulls at ears

Drainage from ears

Excessive wax or dirt in ears

Other _____

2. When does the problem occur? _____

Does not listen

Has trouble following directions

Seems to have trouble understanding

Uses gestures instead of talking to communicate

Does not respond when spoken to from behind or from across the room

f. Does not react to sudden noises

g. Watches speaker's face very closely

h. Asks for frequent repetitions (Huh? What?)

i. Speaks very softly or in a monotone

j. Speaks in a very loud voice

k. Turns head to one side or other

l. None _____

18. When does this problem occur? _____

3. Associated problems

a. Recent colds, sore throats, etc.

b. Other problems

c. Other

d. History of ringing or whistling in ears

e. Other _____

AUSTIN SPEECH, LANGUAGE, AND HEARING CENTER

LANTERN LANE CENTER #100

2825 HANCOCK DRIVE

AUSTIN, TEXAS 78731

TELEPHONE: 454-4223

PATRICIA COLE, M.A., CO-DIRECTOR
MARY LOVEY WOOD, M.A., CO-DIRECTOR

May 26, 1976

Dr. Joyce Evans
Director, Special Projects
Southwest Educational Development Laboratory
211 East 7th St.
Austin, Texas 78701

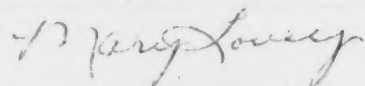
Dear Dr. Evans:

Thank you for the opportunity to respond to the Observational Checklists for Referral. The manual is well done and you and your staff are to be commended for doing well with a difficult task.

I have attached my responses to the specific areas you requested. If you have any questions concerning my suggestions, or if you need additional clarification of any comments, please do not hesitate to contact me.

Thank you again for letting me participate in this project.

Sincerely,



Mary Lovey Wood, Ph.D.
Co-Director

Enclosure: responses to OCR

AUSTIN SPEECH, LANGUAGE, AND HEARING CENTER

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PATRICIA COLE, M.A., CO-DIRECTOR
MARY LOVEY WOOD, M.A., CO-DIRECTOR

Responses to O C R

1. Modifications to the instructional manual

The manual seems readable for supportive personnel and day care teachers.

It might be beneficial to emphasize the fact that we need to compare a child with himself on different aspects of behavior, just as we compare him to other children. If a child does very well in some areas, such as drawing, coloring, etc., and just gets by in other areas, such as listening to instructions, talking, etc., he might be a good candidate for referral.

Another area of emphasis for the teachers might be that a child with problems in one area is high risk for problems in another area. For example, a language-impaired child might also present behavior problems; or, behavior problems might be a signal of learning problems.

The difficulties with over- and under-referral are inevitable, but some of the problems might be alleviated by doing away with the forced-choice response required of the teachers. Instead of allowing a teacher one chance to decide about a child, perhaps some of the check-lists should include a (?) category, where the teacher can note a behavior about which she is not pleased. The teacher could be allowed a two-month grace period for consideration of the child and his behavior. At the end of this time, she must re-mark the check-list to indicate problem / no problem. This would be applicable particularly to Spanish-speaking children who would improve in functioning after a few months structure and stimulation.

2. Suggestions for General Checklist

Change # 9 to read: Doesn't always act as though he hears.

Add some or all of the following items to pick up language/learning disorders:

- a. Doesn't follow directions; may look to see what other children are doing to find out what he should do.
- b. Gives incomplete or wrong answers to questions he should understand.
- c. May echo or repeat questions.
- d. Doesn't learn to use crayons and scissors after few weeks practice.
- e. Needs extra time and help from teacher.

- f. Teacher has a concern about child which is not covered in this checklist. (describe _____)
- g. Teacher's concern remains after two months of school.
- h. Child's behavior changes after absence from school.

3. Suggestions for Specific Checklists

Vision

(to be added to checklist)

- a. Turns book sideways or upside-down to look at it.

Hearing

(to be pointed out to teachers and other observers)

- a. If child is referred for hearing testing and passes hearing screening, he may need to receive speech/language evaluation.*
- b. A child who has difficulty learning to talk may act like a hearing-impaired child.
- c. A child with hearing problems as well as language problems may exhibit behavioral changes after an absence from school.
- d. The hearing-impaired child's classroom placement should be dictated by the type of loss and amplification he has, and seating directly in front of the teacher may not always be indicated.

*The 19% over-referral to hearing screening may have resulted from the referral of language-impaired children for hearing testing instead of language evaluation.

Speech

My personal bias is reflected in my suggestion to change this section to Speech/Language. I would prefer that the teachers' attention be redirected from articulation errors to errors in sentence construction, grammar, memory for instructions and comprehension of speech. Unless the young child is hard to understand, minor misarticulations should be overlooked until other aspects of language and learning are considered.

Suggestions for Checklist (Speech/Language)

- a. Uses incomplete sentences (talks like a telegram) "Me go now", "Daddy eat cookie home."
- b. Does not seem to understand complex directions without visual clues.
- c. Spanish-English checklist for Speech/Language
Does not improve in use of English in the course of the year.
(P.28 provides a nice discussion of the bi-lingual child's language problems, but should include a statement that in the course of the year his English skills should be expanding.)

Suggestions for speech/language checklist, cont

- d. Any of the items I suggested for the General Checklist which pertain to language learning skills.

Suggestions for Behavioral Checklist Instructions

The teachers should be made aware that behavior problems may be related to learning disorders. If a child does not understand what is said to him, or cannot express himself, he may react with disruptive, aggressive behavior - or he may withdraw. Behavioral problems are rarely isolated from other problems. A child with learning disabilities may find it difficult to adjust to any new situation, and may have trouble re-adjusting after an absence from school.

Motor

On p. 41, you have indicated that a child with motor problems should be referred to a pediatrician. I suggest that you add Psychologist and Occupational Therapist to this list. It is not necessarily true that an OTR (Occupational Therapist) works under the supervision of a physician (p.43), and this person might pick up on problems which a physician might not be trained to recognize.

For Motor Checklist

- a. Switches hands (does not use one hand more than the other).
4. The previous suggestion for allowing teachers a let's-wait-and-see, or I'm-not-sure approach might eliminate some over - or under-referrals. Also previously suggested is the emphasis that a child who acts like he has one problem may have problems in other (or another) areas.
5. I am very impressed with the OCR, and with the exception of those suggestions I've listed, I have no changes. I would like a chance to see the follow-up study after this has been in effect for a year.

I feel that the teachers and aides will need training in observing and noting behaviors without making judgments or evaluations. The tendency with some teachers is to say "All that's wrong with him is that he's _____" Practice (and feedback from your staff about the referrals) should make this a very valuable tool for communication with professionals.

6. No additional comments.
7. In the Bibliography, you might add the American Occupational Therapy Association, Washington, D.C., and Central Institute for the Deaf in St. Louis, Missouri.

Review of the OBSERVATIONAL CHECKLISTS FOR REFERRAL
by Linda L. Gotts, Ph.D.

1. Suggestions for modifications to the instructional manual:

Page 2 -- See comments in manual.

Page 2 -- (paragraph 1) -- Underline or italicize to give emphasis: "The General Checklist should be completed for all children in your class."

Page 9 -- (paragraph 1) -- Add a brief description of impetigo and ringworm.

Page 17 -- (lines 1&2) -- This sentence is confusing, since to fill out the Specific Checklist in the first place, the teacher would have to check one or two of the visual behavior items (i.e., the ones appearing on the General Checklist).
Suggest deleting "only" and changing "none" to "few."

Page 21 -- (paragraph 2) - Suggest changing sentence 3 to: "Frequent colds and allergies are health problems...loss."

Page 28 -- (line 1) -- Include a brief definition of "nasality."

Page 28 -- (paragraph 3) - Change sentence 1 to: "In referring the bilingual child...bilingual."

Page 29 -- (paragraph 1) - See the two additions in manual.

Additional suggestions for dealing with the nonfluent child:

DO NOT FINISH THE CHILD'S SENTENCE FOR HIM WHEN HE HESITATES.

DO NOT INSIST THAT HE SPEAK IF HE IS CRYING OR IS OTHERWISE OBVIOUSLY UPSET.

Page 37 -- (paragraph 4) - These definitions of social worker, psychologist, and psychiatrist leave something to be desired, perhaps because of the vagueness (but implied specificity) of the terms "mental," "emotional," and "nervous." It sounds as though they each treat different sorts of problems. In actuality, there is much overlap between the three disciplines in terms of the sorts of problems they deal with and the kinds of techniques they use to deal with the problems. Perhaps this point should be mentioned, along with the definitions.

The three disciplines frequently work in close association with each other. In general, each discipline brings to the person with "emotional" problems a perspective which is somewhat different from the other disciplines, due to different emphases in their training. The psychiatrist has medical training; the psychologist has been trained to administer and interpret psychological tests; the social worker has received training which emphasizes social and family systems and social betterment programs. But in general, they all do counseling or psychotherapy (depending on what degree the professional holds!)

2. Specific suggestions for additions and/or deletions to the General Checklist which would provide for more accurate referral to the appropriate Specific Checklist.

1. #12 -- "Extremely restless all the time; cannot seem to stay still."

Suggest adding E (Behavioral Checklist) as appropriate Specific Checklist to complete.

2. Suggest adding an item which would detect types of epilepsy which are not accompanied by full-blown convulsions.

For example: "Staring spells, however brief, during which no one can get his attention."

3. Specific suggestions for additions and/or deletions in the Specific Checklists which would enhance the probability of accurate identification of children having difficulty.

- i. Suggest adding an item to detect possible seizures (see Question 2 above-- under Health or Behavioral Checklist.)

2. E. Behavioral Checklist

Suggest the following additions:

- a. Is extremely active; always has to be moving
 - b. Seems unable to stop an activity once he has started it (preservation; play is "driven").
 - c. The way he behaves changes a lot from one day to the next (his good days and bad days are extreme.)
 - d. His attention goes rapidly from one thing to another; does not pay attention to any one learning activity for more than 30 seconds at a time.
 - e. Other unusual or extreme behavior _____
3. F. Motor Checklist
- Suggest adding: Unusual drooling. 87

4. Any suggestions which might serve to limit the over- and under-referral rate.

If the General Checklist is actually completed on every child in the class, as the OCR manual instructs, then the under-referral rate would probably be minimal. In practice, I suspect that busy teachers will fill out checklists only on children whom they already see as having difficulty, rather than carefully observing each child in order to complete the General Checklist on everyone.

The training that the teachers receive (or don't receive) in using the OCR would make a significant difference in whether they use the checklists appropriately or rely instead on whatever subjective criteria they happen to use for detecting problems. Even if they only received training on the General Checklist items they might recognize more children with potential problems than they would otherwise -- just by having the items called to their attention.

5. A general statement of your assessment of specific parts of the OCR and of the measure as a whole.

As a result of consultation with various preschools in the Austin area, I see a definite need for a measure such as the OCR which can be used by teachers to identify children who could benefit from special help before they begin to fail in school. It is important, of course, to do this without the stigma of labels, which the OCR successfully manages to avoid.

The information on the checklists should be useful and relevant to the professionals to whom the teachers are referring children. Also, the checklist format provides significant information quickly and is more likely to be read by busy professionals than lengthy written reports.

The ideas in the OCR seem to have been carefully thought out, with the important points emphasized and repeated throughout. There is sufficient detail on the checklists to be helpful but not so much detail that the teacher trying to fill them out will be overwhelmed.

The instructions for each checklist do an adequate job of explaining the various areas covered in the checklist, so that any confusion arising over specific items would usually be clarified by referring to the instructions. In general, the items selected for each specific checklist do a good job of covering the pertinent behaviors or symptoms for that problem area.

In short, the OCR seems to me to be fairly well polished in its present form.

6. Your evaluation of the clarity and readability of the manual as a whole.

With the exception of a few minor changes which I have already indicated, the manual seems easy to read and understand. The consistent format followed in each section helps the readability and the pictures help to clarify.

7. Any additional suggestions for revision.

I would like to stress again the importance of training in the use of the OCR if the objectives for which the OCR was designed are to be achieved. Perhaps a training package could be developed for use in conjunction with the OCR. (For example, a short film of children in an actual classroom could be used-- and trainees could observe and complete the General Checklist on a particular child in the film.) Training might include how to talk to parents of children who teachers wish to refer. -- This seems to be a very difficult and touchy issue for many teachers, and the dread of dealing with parents could contribute to under-referral.

Throughout the OCR manual, teachers are encouraged to ask their supervisors for help in making a referral to the appropriate professional person. Supplemental information regarding appropriate resources for referral might be included for supervisors along with training information and materials.

1. Suggestions for Modification

I felt the need for some explanation as on page 7 to be given prior to page 5. I am specifically referring to the specific checklists code.

2 and 3.

I do not have any recommendations for change as I thought these to be excellent in their present form.

4. The measures seem excellent to me. I would be happy to have some of my field staff (local Head Start Center people) be a part of any trial testing of these checklists. It would seem to me that area workshops in states where this kind of information could be discussed with Head Start people as well as other Early Childhood staff might help in the endeavor. The manual is self-explanatory if people will carefully read. However, I do believe that some type workshop for staff who would be using these observational checklists would be of value.

5. The measure seems excellent to me. I would be anxious for this to be used in my program. There is without question a need for such a measure. I particularly like the explanations prior to the specific checklists. It appears to be written in terms that non-professional staff could use the measures. I feel very, very positive toward the measures.

6. The manual is very clear and I believe to be very useful by non-professional as well as professional staff.

7. I noted three errors which probably have already been discovered or at least I thought them to be errors.

On page 22:

word ser (middle of middle section)

Page 27:

understant (middle of first paragraph)

Page 3:

unusual clumsiness of awkwardness (middle of last paragraph)

Again, I do believe some statewide or areas training within states would be helpful. For example, I feel sure that in Arkansas the State T/TA provides Ruth Stiensieh, ASA, State University, Arkansas would be happy to find a time for these measures, and their usefulness in Early Childhood Programs to be explained.

Again, I reviewed the book twice and feel very positive about it and its usefulness by both professional and non-professional staff.

Thank you for asking me to review these instruments.

Juan Bracey

May 28, 1976

To: Joyce Evans

From: Joy Roye

Re: Review of Observational Checklists for Referral (OCR).

1. A general statement of your assessment of specific parts of the OCR and of the measure as a whole. This includes your assessment of the need for such a measure and its usefulness in aiding teachers in communicating with professionals in providing referral information.

From my experience of directing a Head Start program in a rural area I can state emphatically that there is a need to help teachers recognize the importance of observing individual children and communicate the appropriate information to professionals. Rural programs have two distinct problems i.e...non-certified or formally trained staff and a lack of resources such as diagnostic clinics, pediatricians, psychologists, etc. To combat these problems, steps must be taken to train staff, since it is almost impossible to provide resources. Teachers, being in close contact with the children, can be trained to observe and be of real service as referral agents. Education is fast becoming an institution of specialists, which in urban areas relieves teachers from needing to be aware of handicapping conditions. However, in rural areas, teachers must not only be aware of these conditions but must also be able to observe children and their behaviors so that they can be appropriately referred to professionals.

2. Your evaluation of the clarity and readability of the manual as a whole.

The manual is fairly clear and readable however, I believe some changes could be made in the format that would make it easier to read. First, I would devote a portion of the first part of the manual to the process of referral. For instance:

1. Who observes? Teacher, aide, health worker, etc.

2. To whom is referral made? Head teacher, Center Director, Social Worker, Program Director, Professionals.
3. Who informs parent? Teacher, other staff, professionals.
4. Who completes the follow-up process? Teacher, other staff.

Every program has its own procedure and teachers should not only be aware of the procedure but should follow it step by step. If teachers are to refer directly to professional, the manual becomes more important. By including this information in the front of the manual, needless repetition can be avoided in the instructions that accompany the specific checklists.

Secondly, a page of terms and definitions could be included in the beginning rather than cluttering the instructions all the way through.

Thirdly, the specific checklists could be identified on the General Checklist rather than letters to help teachers choose the appropriate specific checklist.

3. Suggestions for modifications to the instructional manual.

I would hesitate to hand this manual to a teacher to use without other training. Pre-service training could include skits, visuals, role playing, and other methods of pre practice and evaluations where teachers could gain some confidence before actually using the manual.

Teachers not being prepared before using the manual in the first review, could explain some of the problems of over and under referral. Confidence and trust in one's own judgement can help teachers observe more effectively, and confidence is acquired after success is attained.

4. Specific suggestions for additions and/or deletions to the General Checklist which would provide for more accurate referral to the appropriate Specific Checklist.

See attachment #1.

5. Specific suggestions for additions and/or deletions in the Specific Checklists which would enhance the probability of accurate identification of children having difficulty.

See attachments 2,3,4.

6. Any suggestions which might serve to limit the over- and under-referral rate.

High over and under referral rates can be the result of teachers lack of confidence in their ability which would cause them to be over-zealous and over refer or afraid to trust their own judgement and under refer.

Another cause might be the time element. If the checklists are completed early in the program, children and teachers are both in a transition period when a true picture cannot be seen. Some children may exhibit behavior that would indicate a problem when the only problem is that children have had no experience in that particular area. When teachers note a problem, they should provide activities that will give children experience in that area, and then consider the lack of skills for the checklist.

7. Any additional suggestions for revision.

The (OCR) lacks a section on parents rights and the confidentiality laws. I feel strongly that parents are the first persons to consider in making referrals and the manual is weak in this area. Further, no mention is made in the manuals of the existing laws concerning confidentiality. Teachers must be made aware that any information they record can be seen by parents at any time a request is made. Further, the records must be kept confidential so that they are not available to unauthorized personnel or center visitors.

APPENDIX D
TEACHER FEEDBACK FORM

FEEDBACK FORM
OBSERVATIONAL CHECKLISTS FOR REFERRAL (OCR)

Teachers' Name _____ Center or School _____ City _____

Date _____ Number of Children in Class _____ Mexican American _____ Black _____
Anglo _____ Other (Specify) _____

Number of children receiving at least one check on:

General Checklist _____	Health Checklist _____	Social/Emotional
Hearing Checklist _____	Speech Checklist _____	Checklist _____
Motor Checklist _____	Vision Checklist _____	

Number of children referred for follow up services on the basis of the OCR _____

Please rate the checklists and the manual on the following scale:

	Excellent	Good	Average	Poor	Useless
CHECKLISTS	_____	_____	_____	_____	_____

General Checklist _____
Health Checklist _____
Vision Checklist _____
Hearing Checklist _____
Speech Checklist _____
Behavior Checklist _____
Motor Checklist _____
Ease of Administration _____

MANUAL

Introductory Chapter _____
Health Chapter _____
Vision Chapter _____
Hearing Chapter _____
Speech Chapter _____
Behavior Chapter _____
Motor Chapter _____
Referral Sections _____
(Were sections on
pages 11, 17, 22,
28, 37, & 43 helpful?) _____

General Reliability:
(Was the manual easy to
read and understand?)

Illustrations:

- a. Help toward understanding the text:
- b. Contribution toward manual format:

Organization:
(Was the manual clearly
organized?)

Suggestions for change in either checklists or chapters:

1. General
2. Health
3. Vision

4. Hearing

5. Speech

6. Social/Emotional

7. Motor

Which section(s) was (were) most important to you?

Which section(s) was (were) least important to you?

What other tests have you used to screen children for referral?

What did you like best about the manual?

What did you like least about the manual?

What did you like best about the checklists?

What did you like least about the checklists?

What is your overall opinion of the OCR?

Would you recommend the OCR to other teachers?

Please indicate if the following tests are done in your school or center, when, and by whom:

When (Fall/Spring)
Every year or every-
other year

By Whom (title)

Hearing Screening _____

Vision Screening _____

Speech Screening _____

Emotional Screening _____

Psychological Exam
(Stanford-Binet Type) _____

Medical Exam _____

Other comments: (Use back of page if necessary)

APPENDIX E
CONSULTANT MEDICAL FORM

NAME: _____

PHYSICAL EXAMINATION							
HEIGHT		WEIGHT			AGE		BLOOD PRESSURE
IN. OR CM.	PERCENTILE	LB. OR KG.		PERCENTILE	YR.	MO.	
DOES THE EXAM REVEAL ANY ABNORMALITY IN:		A	N	N	E	DESCRIBE FULLY ANY ABNORMAL FINDINGS	
		B	O	O	X		
		N	R	T	A		
		O	M	M			
		R	A	I			
		M	L	N			
		A		E			
		L		D			
GENERAL APPEARANCE,							
POSTURE, GAIT							
SPEECH							
BEHAVIOR DURING EXAM							
SKIN							
EYES: EXTERNALS							
OPTIC FIND							
EARS: EXTERNAL AND							
CANALS TYMPANIC MEMBRANES							
NOSE, MOUTH, PHARYNX							
TEETH							
HEART							
LUNGS							
ABDOMEN (INCLUDE HERNIAS)							
GENITALIA							
BONES, JOINTS, MUSCLES							
NEUROLOGICAL EXAM							
OTHER							

DEVELOPMENTAL SCREENING EXAMINATION			
	NORMAL	OTHER	REMARKS
GROSS MOTOR FUNCTION			
FINE MOTOR & MANIPULATIVE FUNCTIONS			
ADAPTIVE FUNCTION			
LANGUAGE FUNCTION			
PERSONAL - SOCIAL FUNCTION			

SUMMARY OF FINDINGS, TREATMENTS, AND RECOMMENDATIONS

ABNORMAL FINDINGS	ADVICE AND TREATMENT GIVEN	RECOMMENDATIONS OR FURTHER EVALUATION, TREATMENT OR SOCIAL OR EDUCATIONAL SERVICES

SIGNATURE OF PHYSICIAN: _____

DATE: _____

APPENDIX F
CONSULTANT SPEECH FORM

SPEECH AND LANGUAGE SCREENING

NAME:

AGE:

EXAMINER:

DATE:

ARTIC (a) errors:
(b) intelligibility:

VOICE

FLUENCY

ORAL MECHANISM

LANGUAGE

basic info.

Wh-- ques.

syntax

vocabulary

memory

Comprehension

Expression

MOTOR

BEHAVIOR

RATING _____ no problem
_____ possible problem
_____ high risk
_____ definite problem: _____